



# **SELF STUDY REPORT** **(Third Cycle)**

Submitted to  
**National Assessment &  
Accreditation Council  
(NAAC)**  
**Bangalore – 560072**



BY  
**Principal**  
**SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL**  
**COLLEGE, (R.L.T. COLLEGE OF SCIENCE) AKOLA 444001**  
**(MAHARASTRA)**



The Berar General Education Society's, Akola  
(Regd. No. F65 B'bay Public Trust Act.)

**SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL COLLEGE OF SCIENCE,  
(R.L.T. COLLEGE OF SCIENCE)  
CIVIL LINES, AKOLA - 444 001 MAHARASHTRA**

**: Recognized By :**

Govt. of Maharashtra & Permanently Affiliated to S. G. B. Amravati University, Amravati.

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**NAAC REACCREDITED  
GRADE "B"  
WITH CGPA 2.59**

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To

**Dr. Ganesh Hegade,**  
Assistant Advisor NAAC,  
P.O. Box No. 1075, Opp. NLSIU,  
Nagabhavi , BANGALORE - 560072

**Subject: Intimation regarding uploading of SSR / RAR on our website.**

Dear Sir,

We hereby intimate that SSR / RAR is uploaded on website as per following details.

- |  |  |
|--|--|
| ✓ Name of the Institution                | : <b>Shri Radhakisan Laxminarayan<br/>Toshniwal College of Science<br/>(R.L.T. College of Science)<br/>Civil Lines Akola, 444001<br/>Maharashtra</b> |
| ✓ Head of Institute                      | : <b>Dr. V. D. Nanoty</b>  |
| ✓ Contact Mobile Number                  | : 9822724504   |
| ✓ Co-Ordinator                           | : <b>Dr. Poonam T. Agrawal</b>   |
| ✓ Contact Mobile Number                  | : 7588793195   |
| ✓ Track ID                               | : MHCOGN10613  |
| ✓ Website                                | : <a href="http://www.rltsc.org">www.rltsc.org</a>   |
| ✓ Date of Uploading SSR/RAR              | : 26/02 / 2015   |
| ✓ Probable date of Submission of SSR/RAR | : 26/03/ 2015  |
| ✓ Web-link showing SSR                   | : <a href="http://rltsc.org/AQAR">http://rltsc.org/AQAR</a>  |
| ✓ Probable date of NAAC Peer Team Visit  | : 09,10 September 2015,  |

I look forward to hear from you on your decision for peer team visit to our college.

Thanking you.

**Dr. V. D. NANOTY**  
Principal

Shri .R.L.T. College of Science Akola

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# **Acknowledgement**

With invaluable inputs received from all the Departments, Committees & Cells, Faculty Members and Office Staff, Shri R. L. T. College of Science, Akola, Self Study Report (SSR) – 2015 has been prepared by the College NAAC Steering committee.

## **STEERING COMMITTEE**

<b>Name</b>	<b>Position held</b>
Dr. Vijay D. Nanoty	Chairman
Dr. Poonam T. Agrawal	Co-ordinator
Dr. S. M. Padhye	Member
Dr. Umesh K. Bhalekar	Member
Shri. Ram G. Chavan	Member
Shri. Rajesh D. Chandrawanshi	Member
Dr. Sushil M. Nagrale	Member
Dr. Archana H. Amaley	Member
Dr. Pradip P. Deohate	Member

## PREFACE

Akola city is the heart land of cotton growing farmers of Vidarbha region. Akola city is a 'Rajeshwar Nagari' because of the famous Raj Rajeshwar Temple. It is an important station of central railway on Mumbai-Kolkata route. On the auspicious day of "Makar Sankranti" (14<sup>th</sup> January 1935), an admirer of education, Late Shri Baburao Joshi and his crony founded the institution now known as "The Berar General Education Society" (B.G.E. Society) at Akola. Late Shri G. V. Karnik was pioneer President of this society. With generosity of local donors the B.G.E. Society grew like the banyan tree under which five colleges and two schools are serving the noble cause of education. The dedicated teachers serving in the institutions under B.G.E. Society won the trust of the people of Vidarbha in respect of quality of education.. The B.G.E. Society, Akola initially started the science faculty in Sitabai Arts College with Mathematics stream. Biology section was added in 1966. Late Shri Radhakisan Laxminarayan Toshniwal, a generous person donated Rs. 50000 (Fifty Thousand) to the B.G.E. Society to start an independent science college. Thus Shri Radhakisan Laxminarayan Toshniwal College of Science, Akola came into existence on 1<sup>st</sup> of April 1970.

Shri Radhakisan Laxminarayan Toshniwal College of Science, Akola (Shri R.L.T. College of Science, Akola) is pure science faculty College with postgraduate department in Mathematics, Chemistry, and Microbiology. Thus education from XI<sup>th</sup> Std. till M.Sc. is imparted in the college premises.

The college has clear ideas regarding the development of the students and they are stated in the vision and mission statement of the college. The objectives of the college also reflect on how it wants to bring about welfare of the society by imparting science education to the students. The college is affiliated to Sant Gadge Baba Amravati University, Amravati and strictly follows the University and Government norms in its functioning.

As the one of the pioneer college at the service to the nation, R.L.T. is committed to empowering students to think independently to understand the complexities and challenges of today's life and transform them into

opportunities; to set benchmarks for other and finally to epitomise the change they seek to bring in the world.

## Principal's Message

As I muse over the glorious decades of R. L. T. College's growth, my heart fills with love, admiration and pride for the fertile soil which the College provides to the students who enter its portals to leave as responsible human beings. True to its motto, R.L.T. College always aspires to aim high, scaling great heights in its quest for excellence in imparting human, intellectual, spiritual and moral formation to the students, delivering quality education at all levels. Having successfully crossed the various hurdles encountered on the way of its growth, R. L. T. College of Science has grown in stature and strength today, and has become one of the finest educational institutions dedicated to the pursuit of knowledge and excellence.

As a present custodian of this premier institution, I am extremely pleased to submit this self-study report of our college for third cycle which signifies the contributions made by our college in last 5 years. By this humble submission, we offer ourselves for quality inspection to serve better in future by getting accredited. This self-study report has been prepared as per the norms set by NAAC and gives an insight into our efforts of scaling new heights and raising the bar further.

This exercise has provided us an opportunity to review and analyze the institutional progress after the second accreditation and further strengthened us in our quest for Quality in the times to come. The Internal Quality Assurance Cell, established after the second accreditation of our college, has been instrumental in raising the bar of excellence and adopting and implementing diverse quality enhancing measures during the Post-accreditation period. The college complied with almost all the recommendations of the Peer Team in a planned and systematic manner.

This report is the outcome of the collective efforts of the entire campus community. I deeply appreciate the wide involvement and sincere, collaborative effort of the all the entire stakeholders team. The college is striving to carve a niche for itself on the world education map by adopting innovative initiatives, acquiring new skills and employing new techniques. The multi-faceted achievements, innovations and best practices recorded in this reaccreditation report bear the testimony to the organized, transparent and collaborative functioning of the college.

May the Quality Education, we impart to our students in R. L. T. College of Science enlighten their minds and enthuse their hearts towards always aiming high. It would be a great delight to hear from you soon on Peer Team visit for inspection of our College.



Dr.V.D.Nanoty  
Principal

# **Executive Summary**



## **Criterion I Curricular Aspects**

The Vision , Mission, Goals & Objectives are communicated to the internal and external stake holders through college prospectus, website, Principal's address ,displays in the departments and at prominent places, Parent Teachers meetings ,Alumni meetings and executive meetings of the management.

The institution implements the curriculum given by the university by developing the action plans through several committees like Academic Calendar, Admission, Time table, Examination etc. These action plans are monitored by heads of all departments for effective implementation of curriculum. For satisfactory implementation, the support is received from IQAC, Principal, Management, Alumni and rich infrastructural facilities of the college.

In the development of the curriculum of the university, the staff members of the college actively participate through meetings of Board of Studies / Subcommittees of Board of Studies of S.G.B. Amravati University. The college runs certificate /diploma/skill development courses like CCLT, DCLT and ADCLT as add on courses. Thus the college offers in all One UG course, three PG courses, three Ph.D. programs and three certificate/diploma courses. Among these courses/programs, PG courses in Chemistry, Microbiology, UG courses in Information Technology, Bioinformatics & Biochemistry and certificate /diploma courses are run as self-financed courses.

The institution carries several activities to supplement the curriculum of the university .These include add on courses, personal development of students through project works, seminars by students, field visits ,participation in seminar competitions, guest lectures, study tours, participation in elocution/debate competitions, university level research festival (Avishkar),science exhibitions etc.

The college obtains feedback on curriculum from Students Alumni, Industries, Academic peers, and community. Feedback thus obtained are discussed and analyzed in staff council meetings and are communicated to the university through BOS,Academic council and senate members of the university for refinement of the curriculum.

## **Criterion II Teaching –Learning and Evaluation**

The college has centralized admission cell accompanied by the student counselling committee. The details regarding the college and its admission procedure are published in the prospectus of college.

The advertisements for the admission to various programmes are published in electronic and print media i.e. in local and regional dailies. The details about the admission procedure are also made available on college website and are displayed on notice boards and banners in college campus. Admissions are made on the basis of merit and first come first preference.

In last three-four years the number of admissions to various programmes is increased. University also permitted the college to admit 10% extra students than the intake capacity of some programmes. The college gives due respect to the value of democracy, social justice, equality, peaceful co-existence and ethics, the strategies adopted to increase/improve access for SC/ST/OBC, women, differently-abled, economically weaker sections and minority community students. More than 75% of the students admitted to UG, PG and Ph.D. programmes during the session 2010-11 to 2014-15 are of various socio-economic backward classes and women category.

The students of differently-abled, economically weaker sections and minority community are also the part of college. The college is sensitive to differently-abled students and caters to the needs of differently-abled students and ensure adherence to government policies. The provision of ramps, railings, wheelchairs for physically handicapped students is made available in various wings of the college as well as library and women hostel. The study material, notes and question bank are provided to the students who suffer from learning disabilities. The college makes special seating arrangement for differently-abled students in college and university examinations.

The students are encouraged to participate in some enrichment programmes like workshops, seminars, group discussions, research festivals. The special aptitude tests and concept tests in various subjects along with the value based lectures of various eminent personalities, academicians, socialists, industrialists are also organized by the college. The remedial coaching is given to the students along with the NET/SET and MPSC/UPSC entry-in services classes. The experimental learning through study tours, industrial visits and field work is also increasingly practiced in various departments.

The computerization of library facilities is done. The network resource centre (NRC) is established in library with INFLIBNET educational sources of UGC and Government of India. The internet connections with broadband facilities are made available in all the departments, library and administrative office. The WI-FI network is also established in some specific areas.

All the laboratories in the college are well furnished and highly equipped for effective practical teaching and research oriented results.

There are total 19 laboratories with recognized research facilities in the subjects' chemistry, microbiology and mathematics. The college has well equipped virtual class rooms with all essential audio-visual aids for the purpose of seminars, guest lectures, power point presentations, film shows, open defense viva, virtual lectures etc.

The college has total 24 permanent teachers. 13 teachers are having Ph.D. degree, 7 are having M.Phil degree. 6 teachers are NET/SET qualified, 4 teachers are having both Ph.D. and M.Phil. degree. 6 teachers are registered for Ph.D. and 1 teacher has submitted the Ph.D. thesis. During the session 2010-11 to 2014-15 total 11 faculty members attended the orientation programmes, 15 attended the refresher courses and 3 attended the short term training programmes.

### **Criterion III Research, Consultancy and Extension**

Every teacher is a good researcher. Keeping this in mind, college has taken innovative measures to boost the research aptitude among the teachers and students. At present PG departments of Mathematics, Chemistry and Microbiology are recognized research centres and some of our faculty members are approved research guides in our university as well as in other universities. Over all 21 research students enrolled for PhD during 2010-11 to 2014-15.

The college research committee and IQAC encourage staff to take up research activities and engage in interdisciplinary research activities. The college provides full support in terms of administrative, academic and human resources required to enable faculty to submit project proposals and approach funding agencies for mobilizing resources for Research. UGC sanctioned 10 Minor and 1 major research project during the session 2010-11 to 2014-15., with sanctioned grant of Rs. 24, 59,800/-.

Out of existing 24 faculties, 13 faculties are PhD holder whereas 6 faculties are pursuing PhD and PhD thesis submitted by one faculty.

Overall 93 research papers are published in journals and 168 papers are presented in seminars/ conference/workshops. Research ambience in the campus is achieved by the visits of experts and Scientists during workshops/seminars and their interactions with students. Every year students actively participate in research festival Avishkar and are awarded with colour coat and selected upto state /national level. During 2010-11 to 2014-15, 2 students selected for national level Avishkar, 11 students for state level Avishkar and 17 students for University level research festival.

The college magazine “Pratibimba” and Wall Magazines and ZEBRA cell of Zoology and MICRAN of Microbiology provide a platform for students to sharpen and exhibit their creative skills and research aptitude. Collaborations with different agencies and NGOs offer the students of humanities practical exposure and a chance to apply their learning in the field research. College also develop non remunerative, voluntary consultancy service.

The college has a wide range of Extension and outreach programmes with special focus on the underprivileged and the vulnerable sections of society. Workshops, seminars, talks, poster exhibitions, awareness campaigns are regularly held by the organizations. The College has active NSS unit, Red Ribbon Club (RRC), Legal Literacy Club (LLC), NCC for organizing different extension and outreach programmes around the year. NSS unit organizes annual voluntary blood donation camp NSS unit organizes workshop/ seminar/ discussion/ awareness programme/ sensitizing programme/ legal literacy programme around the year. Many NCC volunteers have won prizes and received recognition for their active participation in the state as well as national level camps. 5 students are participate in RD parade and 4 students participate in National integration camp. College sport extension club also actively participate in extension work. Director of Physical education developed physical fitness center and coaching in Judo, wrestling and Boxing for needy and poor people of the school and colleges and organized intercollegiate tournaments. College also establish Sky observation Club for students and faculties to aware and to enhance the knowledge of the space science and astronomy.

#### **Criterion IV Infrastructure and Learning Recourses**

The college is located in the heart of the city with 1.796acres/7270.99 Sq.mts. of land and built area of 6408.38 Sq.mts. The college is having excellent physical infrastructural facilities to support teaching learning process. The college has spent RS.3.86 Cores in the infrastructure and learning recourses. The built up infrastructure is made up of 21 spacious classrooms with fan and lighting arrangements, 19 well equipped laboratories, two recognized research laboratories and a department, a state of art multipurpose auditorium, seminar room with audio visual aids, new well furnished central library with Network Resource Centre, internet connectivity, Inflibnet, separate, reading rooms, for students and staff, NSS, NCC, Department of Physical Education, IQAC Office, Principal office with antechamber, Administrative offices, Teaching staff room, Examination room, Ladies staff room, Girls common room, ladies toilet etc. In addition to these audio visual aids, OHPs, LCD/DLP projectors, Power generator. UPS, Invertors, Safe drinking water, Vehicle, parking for students and staff as well as play ground facilities for indoor and

outdoor games, two gymnasium halls with gym equipments & judo wrestling etc. The college has adequate ICT infrastructure including 81 computers and 10 laptops, internet connectivity and Wi-Fi facility.

The college has well furnished one women's hostel with total area of 1072.98 Sq.m, 8 rooms accommodating 24 girl students. In this hostel there is a reading hall, dining hall, kitchen, visitor's room, sick room, a water purifier with water cooler and solar water heater. There is separate recreation room with TV set for entertainment of inmates. The infrastructural facilities are optimally utilized. Apart from teaching – learning, curricular and co-curricular, extracurricular activities, the infrastructure is utilized for social cause for various government and non government examinations.

### **Criterion V Student Support and Progression**

Educational atmosphere of our college helps and motivates students to stand in Merit List of University. Due to maximum facility for research, students are awarded colour coats in research Festival “Avishkar”. Students have also been selected for “Anvention” National Level Research Festival.

Student representing College in various sports event laid down tradition of getting colour coats as well as to participate in West Zone or All India Inter University Tournaments through Department of Physical Education. Every year players are awarded by Gold, Silver or Bronze medal in Inter Collegiate Tournaments of University in various sports event. Extension Work of Department of Physical Education is fully devoted for poor and needy students from different Schools or Colleges. Extension work fully engages spare time of students in positive activity so that they get sports achievement certificates in various events. These sports achievement certificates help them to get jobs in different fields as per government rules.

National Social Scheme has a great history to complete social responsibility. Activities of this scheme help students to develop their personality through organization of various programme in campus and outside of the campus. Aim of National Cadet Corp is “Life devoted for Nation”. The NCC aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens. This aim motivates students to develop their personality for Nation Security.

Institution identifies enthusiastic student and motivate them to take part in various cultural activities organized by institution. So that students get social recognition by creating their own identity in the society. No major issue has been reported related to Grievance, Sexual Harassment and Ragging till date. Students Representative Council actively cooperates in every activity of college. Our University

Representative or College Secretary has been selected as a member in University Students Representative Council.

Alumni Association helps institution in various programs and develops entrepreneurial skills among interested students for business. University Grants Commission's various schemes are fully utilized for the betterment of student's life progression. Feedback from students is most important for development of institution. Institution is ready to bring changes as per the suggestions related to student's progression.

### **Criterion VI Governance, Leadership and Management**

The governance and leadership of Shri R.L.T. college of Science, Akola is managed by The Berar General education society, Akola. The visionary and transformative status of college has received special attraction in Vidarbha. Shri Radhakisan Laxminarayan Toshniwal College of Science dedicates itself to the cause of science education and propagation of scientific temper among the students. With respect to the aims and objectives the institute caters the needs of economy, society and country as whole. Our institute contributes substantially to the development of nation. Regular meetings of the B.G.E. Society, Heads of the department and IQAC provides platform to present, discuss the perspective plan of college and helps in effective implementation of institutional policies. Principal is the administrative head of the college. Senior faculties of college work to assist Principal. Various committees have been framed to co-ordinate various activities of college. Principal works closely with administrative team which comprises of Principal, IQAC co-ordinator and Heads of the departments to offer effective leadership by participating in decision making policies in coordinating with the academic and administrative planning and implementation. Professional competence of staff is updated regularly. Finance and account department is working under the supervision of account officer and under administrative control of Principal. Principal implements all tasks related to finance and accounting. Departmental allotment of money is decided by Principal in consultation with Head of the departments. Chartered accountant has been appointed by the management to monitor efficient and effective use of finances. The main source of income of college is from state government of Maharashtra in the form of salary, and UGC in the form of developmental grants, any deficit in the annual budget is managed by college through The B. G. E. Society. College also makes efforts to secure additional funds from UGC in the form of additional grants.

As per guidelines of NAAC, IQAC has been functioning. Regular meetings of IQAC and heads of the departments help in effective planning and implementation of institutional policies. Review

on annual progress and assessment is done by IQAC. Quality policy is implemented by taking feedback from various stakeholders. Mechanism for regular performance appraisal of staff has been evolved to insure academic excellence. AQAR presents us an opportunity to evaluate and improve our functioning every year.

### **Criterion VII Innovations and Best Practices**

To maintain ecofriendly college campus attempts are being made. Old big trees are taken care for fresh atmosphere in premises. Green audit of college campus is conducted by non government organization '**Shrustivaibhav**'. The green projects like installation of 'Solar water heater' in girl's hostel, 'Automatic solar based LED lights' in college campus, No vehicle days and use of non conventional method for Post Graduate student's projects of Chemistry department has developed environmental consciousness. Awareness campaign such as 'Switch it ON Switch it OFF', Eradication of plastic has brought positive change in thinking abilities of the students.

Sky Observation Club (SOC) of college generates curiosity and inspires young minds of our science students to contribute the understanding of world around us. Astronomy Gallery is one of the major attractions of SOC. Members of SOC undertook special astronomy awareness programs for the school students and people of adopted village. For fulfilling the mission of the college, various co curricular and extracurricular activities are planned and organized to raise the moral and ethical values among the students as well as stakeholders. The evidence of success is reflected in the day to day functioning of the college and overall reflection in personality development of student and staff.

## **Part- I INSTITUTIONAL DATA**

### **A. PROFILE OF THE INSTITUTION**



## A. Profile of the Affiliated / Constituent College

### 1. Name and Address of the College:

Name :	Shri Radhakisan Laxminarayan Toshniwal College of Science, Akola(R.L.T.College)	
Address :	Civil Lines near post office, Akola	
City :Akola	Pin :444001	State :Maharashtra
Website :	www.rltsc.org	

### 2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. V.D. Nanoty	O:0724 2415480 R: 0724 2410476	9822724504	2415650	<a href="mailto:principal@rltsc.org">principal@rltsc.org</a> , <a href="mailto:vijay_nanoty@rediffmail.com">vijay_nanoty@rediffmail.com</a>
Vice Principal		O: R:			
Steering Committee Co-ordinator	Dr. P.T. Agrawal	O: R:	7588793195		Poonamagra wal2575@rediffmail.com

### 3. Status of the Institution:

Affiliated College

Constituent College

Any other (specify)

### 4. Type of Institution:

a. By Gender

i) For Men

ii) For Women

iii) Co-Education

b. By Shift

i.  Regular

- ii. Day
- iii. Evening

5. It is a recognized minority institution?

Yes

No  Yes

If yes specify the minority status (Religious/linguistic/any other) and provide documentary evidence.

6. Sources of funding:

Government

Grant-in-aid

Self-financing

Any other

7. a. Date of establishment of the college: 01/04/1970

b. University to which the college is affiliated /or which governs the college (If it is a constituent college) Sant Gadge Baba Amravati University, Amravati

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	08/05/1987	
ii. 12 (B)	03/09/2007	

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.) N.A.

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.				
ii.				
iii.				
iv.				

8. Does the affiliating university Act provide for conferment of autonomy (as

recognized by the UGC), on its affiliated colleges?  
 Yes  No

If yes, has the College applied for availing the autonomous status?  
 Yes  No

9. Is the college recognized?  
 a. by UGC as a College with Potential for Excellence (CPE)?  
 Yes  No

If yes, date of recognition: ..... (dd/mm/yyyy)

b. for its performance by any other governmental agency?  
 Yes  No

If yes, Name of the agency ..... and  
 Date of recognition: ..... (dd/mm/yyyy)

10. Location of the campus and area in sq.mts:

Location *	Urban
Campus area in sq. mts.	7270.999 Sq. Mts.
Built up area in sq. mts.	5942.11 Sq. Mt.

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

• Auditorium/seminar complex with infrastructural facilities .

Auditorium :- we have one multipurpose auditorium hall. Which have various Facilities.

- The college has magnificent Auditorium to provide excellent facilities for extracurricular activities & curricular activities.
- The auditorium is unique in the region. It has rich infrastructure, a pleasant atmosphere and perfect audio- visual systems. It has area of 3335 sq-ft area with permanent stage, Fan, tube Lights arrangement, main curtains remote controlled operated.
- Seating capacity 360 chairs.

It is centralized air cooled with excellent acoustics treatment and with facilities like green roofs, display screen, LCD Projector, Smoke detector Alarm system, Turbo ventilators, public

- address system, sound system, musical instruments,
- Internet connection for online information.
- Adequate stage property for theater events.
- Special room for makeup & rehearsals.
- Badminton court for playing badminton.
- Generator facility in case of power failure.

### Sports facilities

- Play ground

1	Outdoor Games	Boxing, Physical Fitness training, football, Athletics.
		For the outdoor games like football, physical training. The institute provides facility by using other grounds by permission.

Sr. No.	Facility	Detail
2	Indoor Games	Table Tennis, Badminton, Chess, Judo, Wrestling.

- swimming pool :- None
- Gymnasium:- Yes

There are two Separate rooms of (21 X 25 Ft) which remains open in the morning & evening time. The entry to Gymnasium is free of cost for college students teaching, Non-teaching staff member's player of Judo, Wrestling and Boxing of external work and Community work.
Equipped with 17 stations Leg Curl + Leg Extraction machine, High Lat pulley with low Lat Weight 70 Kg, PeckDec (butterfly) machine, Hack squat, Abdominal board, multihips Jogger manual, standing twister steel, Flat bench, Decline Bench, Incline Bench, Curling Bar, Iraining Bar, dumbbells, Weizhing Plates, Dambells Rack – 1, Wrestling mats – 32, Wrestling Dummies = 03

- **Hostel**

- Boys' hostel :- None
  - Number of hostels
  - Number of inmates
  - Facilities (mention available facilities)
    - Girls' hostel :- yes

- i. Number of hostels :-
- ii. Number of inmates :-

01
24

- iii. Facilities (mention available facilities)

- 8 rooms with Cot, Table, Cupboard, Fan & Light
- One reading hall with news paper and magazines
- One Common hall & dining hall
- kitchen/Pantry with kitchen servant
- Warden room with attached toilet
- Visitor room
- Sick room
- A water purifier & water cooler.
- Solar water heater.
- Fridge
- Security Guard for 24 Hours Security
- First Aid Box, Doctor on Call,
- Two lady Servants.
- Inverter for power backup.
- Ramp Facility.
- Servant Room

- Working women's hostel :- None

- i. Number of inmates

- ii. Facilities (mention available facilities)

- Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise) :- None.

Cafeteria - yes

Health centre – First aid, Inpatient, Outpatient, Emergency care facility, Ambulance..... Health centre staff –

- I) First Aid Box is provided in each department and laboratory.
- II) Every year college conducts health checkup camp for all students (by Physical Education Department). For this purpose one Lady Doctor for girl students and one male doctor for boy's student is invited to do the through checkup.
- III) Every year, on 24<sup>th</sup> December free blood test camp (blood Group check, sugar level check, hemoglobin checking) arranged. On this day we organize blood donation camp for students & staff in the memory of Late principal M.G. Joshi sir in the college.

IV) For staff health care the college has M.O.U. with well established ICON Hospital, Akola (off the campus).

Qualified doctor Full time  Part-time

Qualified Nurse Full time  Part-time

- Facilities like banking, post office; book shops Banking Facility are made available for students Co-operative store is available for students.
- Transport facilities to cater to the needs of students and staff. State transport passes were made available for students who cannot stay at hostels in Akola but commute from nearby villages.
  - Animal house :- None
  - Biological waste disposal :- yes
- Generator or other facility for management/regulation of electricity and voltage.
- ❖ The institution has 10 KVA Generator, It is connected to all Laboratories library and office and all classrooms
- ❖ Online U.P.S. of 7.5. KVA is installed for computer and I.T. Department for Uninterruptible power supply.
- ❖ Inverters are provided in all departments.
  - Solid waste management facility: Yes
- Waste water management: - waste water is provided for plant: Yes
  - Water harvesting: Yes

12. Details of programmes offered by the college (Give data for current academic year)

S. No.	Programme Level	Name of the Programme	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student	No. of students
	Under-Graduate	B.Sc.	3 Years	H.S.C.	English	462	453
	Post-Graduate	M.Sc.(Maths)	2 Years	B.Sc.with Maths	English	88	90
		M.Sc.(Chemistry)	2 Years	B.Sc.with Chemistry	English	18	18
		M.Sc.(Microbiology)	2 Years	B.Sc.with Maths	English	20	16

	Integrated Programmes	Nil	Nil	Nil	Nil	Nil	Nil
	Ph.D.						
	M.Phil.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Ph.D	M.Sc.(Maths)	2 Years Minimum	As per U.G.C. & S.G.B. Amravati University Norms	English	As per U.G.C. & S.G.B. Amravati University Norms	Nil
M.Sc.(Chem)		2 Years Minimum	As per U.G.C. & S.G.B. Amravati University Norms	English	As per U.G.C. & S.G.B. Amravati University Norms	Nil	
M.Sc.(Micro)		2 Years Minimum	As per U.G.C. & S.G.B. Amravati University	English	As per U.G.C. & S.G.B. Amravati University	Nil	
	Certificate	C.C.L.T.	01 YEAR	H.S.c.	English	56	56
	UG Diploma	D.C.L.T	01 YEAR	C.C.L.T.	ENGLISH	14	14
A.D.C.L.T.		01 YEAR	D.C.L.T	ENGLISH	NIL	NIL	
	PG Diploma	NIL	NIL	NIL	NIL	NIL	NIL
	Any Other (specify and	NIL	NIL	NIL	NIL	NIL	NIL

13. Does the college offer self-financed Programmes?



Yes ✓

No

If yes, how many? 08

14. New programmes introduced in the college during the last five years if any?

Yes	✓	No		Number	4
-----	---	----	--	--------	---

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
Science	Bio-Chemistry	√	-	-
	Bio-Informatics	√	-	-
	Botany	√	-	-
	Chemistry	√	√	√
	Computer Science	√	-	-
	Electronics	√	-	-
	Information Technology	√	-	-
	Mathematics	√	√	√
	Microbiology	√	√	√
	Physics	√	-	-
Zoology	√	-	-	
Arts	N.A.	N.A.	N.A.	N.A.
Commerce	N.A.	N.A.	N.A.	N.A.
Any Other (Specify)	N.A.	N.A.	N.A.	N.A.

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)

- a.  system -
- b.  system 15
- c.  -

17. Number of Programmes with

- a. Choice Based Credit System
- b. Inter/Multidisciplinary Approach
- c. Any other (specify and provide details)

18. Does the college offer UG and/or PG programmes in Teacher Education?

Yes  No

If yes,

- a. Year of Introduction of the programme(s).....  
(dd/mm/yyyy) and number of batches that completed the  
 programme
- b. NCTE recognition details (if applicable)



Notification No.: .....

Date: ..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of  
Teacher Education Programme separately?

Yes  No ✓

19. Does the college offer UG or PG programme in Physical Education?

Yes  No ✓

If yes,

a. Year of Introduction of the programme(s) .....  
(dd/mm/yyyy) and number of batches that completed the  
programme

b. NCTE recognition details (if applicable)

Notification No.: .....

Date: ..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of  
Physical Education Programme separately?

Yes  No

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty			Non-teaching staff	Techn ical staff
	Professor	Associate Professor	Assistant Professor		
	M/F	M/F	M/F	M/F	M/F
Sanctioned by the UGC / University / State	N.A.	N.A.	49	24	52

Government	POST ARE SANCTIONED IRRESPECTIVE OF GENDER									
<i>Recruited</i>	M	F	M	F	M	F	M	F	M	F
				5	-	13	6	17	1	22
<i>Yet to recruit</i>					25		6		28	
Sanctioned by the Management/ society or other authorized bodies	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<i>Recruited</i>										
<i>Yet to</i>	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

\*M-Male \*F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	03	-	06	04	13
M.Phil.	-	-	01	-	04	02	07
PG	-	-	01	-	03	-	04
Temporary teachers							
Ph.D.	-	-	-	-	04	02	06
M.Phil.						02	02
PG					18	74	92
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

22. Number of Visiting Faculty /Guest Faculty engaged with the College 13

23. Furnish the number of the students admitted to the college during the last four academic years.

Categorie	2010 - 11		2011-12		2012-13		2013-14		2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	52	51	49	50	40	59	47	87	47	107
ST	07	06	07	12	11	14	08	12	06	14
OBC	99	157	57	90	121	296	134	357	139	428
Gener	36	72	55	115	65	175	73	228	41	171

Others	20	11	22	25	21	31	25	50	88	210

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	1016	237			1256
Students from other states of India		03			
NRI students					
Foreign students					
Total					

25. Dropout rate in UG and PG (average of the last two batches)

UG  PG

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) including the salary component

(b) excluding the salary component

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes  No ✓

If yes,

a) Is it a registered centre for offering distance education programmes of another University  Yes  No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes  No

28. Provide Teacher-student ratio for each of the programme/course offered

29. Is the college applying for

Accreditation: Cycle 1  Cycle 2  Cycle 3  Cycle 4

Re-Assessment:

*(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re- accreditation)*

30. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle1: 08/01/2004 Accreditation Outcome / Result **B**.

Cycle2: 28/03/2010 Accreditation Outcome/Result **B (2.59)**

Cycle3:..... Accreditation Outcome/Result.....

*\* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.*

31. Number of working days during the last academic year.

240

32. Number of teaching days during the last academic year

*(Teaching days means days on which lectures were engaged excluding the examination days)*

183

33. Date of establishment of Internal Quality

Assurance Cell (IQAC) IQAC 26/08/2011

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) 24/10/2011 (dd/mm/yyyy)

AQAR (ii) 05/11/2012 (dd/mm/yyyy)

AQAR (iii) 29/10/2013 (dd/mm/yyyy)

AQAR (iv) 16/09/2014 (dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

## **B. CRITERIAWISE ANALYTICAL REPORT**

## **Criterion I - Curricular Aspects**

### **1.1 Curriculum Planning and Implementation :-**

#### **1.1.1. State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.**

#### **VISION**

To become one of the best educational institutions in the country, aspiring for national recognition of excellence through Teaching, Learning, and Research & Extension in the field of Science & Technology.

#### **MISSION**

Shri R. L .T. college of Science dedicates itself to the cause of science education and propagation of scientific temper among the students. It seeks to mould a student into a multifaceted person with a pragmatic mind and humane outlook capable of facing the challenges of 21<sup>st</sup> century. Shri R. L .T. College of science expects every student entering its portal to be a disciplined, hardworking, well-read member of the community ready to give one's best to country.

#### **GOALS & OBJECTIVES**

- To impart higher education in science to the students of this region
- To promote the activities which are necessary for the welfare and overall development of students.
- To help the needy and economically weaker students in education.
- To inculcate discipline, sincerity and devotion among the students to make them responsible and respectable citizens.
- To develop the qualities of leadership among the students.
- To prepare the students for fetching new opportunities in the field of employment / business etc.
- To educate the students with emphasis on values such as cleanliness, national integration, respect for environment, honesty, nationality, patriotism etc.

The Vision, Mission, Goals & Objectives statements are communicated to the students through

- The college prospectus and website
- Principal's address at the opening of the session
- The display at the staff room of the departments
- The display at the prominent places in the campus
- The meetings /interactions with the stakeholders
- The annual executive meeting of the management

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

The college council develops action plans for the implementation of the curriculum of the courses designed by the university. The academic calendar committee of the institution prepares academic calendar every year in accordance with the academic calendar of the university. The academic calendar provides the information about working days, holidays, schedule of internal examinations and number of teaching days in the forthcoming academic sessions of the institution.

The details with regard to programs offered by the college, the various courses in each program, evaluation system, grading, internal assessment and attendance as laid down by the university are conveyed to the students through college prospectus.

The admission committee conducts the admission procedure; the committee then informs the concerned departments about the number of students admitted to each course.

The Heads of the departments are authorized to monitor the implementation of the academic action plans. The teachers in the concerned departments prepare semester wise teaching plans through academic diaries meant for teachers. These plans are then implemented.

**1.1.3 What type of support (procedural and practical) do the teachers receive from the University and/or institution for effectively translating the curriculum and improving teaching practices?**

The IQAC of the college imparts sufficient support for effective implementation of the curriculum envisaged by the university.

All classrooms are provided with good environment for teaching with white boards, green boards, and some traditional chalk boards, as required. Teaching process employs both traditional and modern methods. They include lectures, discussions, presentations by students and utilization of teaching and learning aids including audio visual facilities. These facilities are available in each department as each department is provided with LCD projector so as to facilitate teaching with power point presentation.

The students are provided with reference facilities in the central library and departmental libraries of the respective departments for supporting curriculum and also with the internet and INFLIBNET facility. Students are intimated in advance about seminars and assignment topics in order to have a good preparation for the class tests. Internal examinations are conducted by the institution to make students well acquainted with the university examination system. Seminars and such other informative programs are



conducted for the enrichment of the students and the faculty.

As per the curriculum, the university organizes seminars and workshops for the affiliated colleges. Accordingly, the institution promotes and provides orientation programs, workshops, seminars and training programs in each semester for effective implementation of the curriculum. The institution is very particular that all teachers should improve themselves by attending Refresher and Orientation Courses, National/International conferences, Seminars and Workshops.

The college maintains Computer Labs, IT Lab, PG Computer Lab, and Laboratories etc. for improving the knowledge of students in various disciplines. Departmental & Central library has full-fledged reference facility for the knowledge enhancement of the students and the faculty.

#### **1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

The institution works very hard for the betterment of the students. It takes following initiative in teaching learning process for smooth and effective delivery of the curriculum as follows.

- The college has well qualified staff with knowledge of ICT.
- The college teachers take the review of the curriculum to be taught and prepare the teaching plan for theory and practical.
- These curriculum plans are prepared department wise, subject wise & semester wise.
- Students' seminars and group discussions are held by using ICT based modern teaching aids.
- The college has well-furnished and spacious laboratories.
- The faculty is well trained through orientation programs, refresher courses, workshops, seminars, conferences.
- Guest lectures are organized for the students.
- The central library and departmental libraries provide the books and journals to the teachers and students.
- The students are provided a separate reading room.
- To provide the real life experience the field trips / educational tours are conducted by the department of Chemistry, Zoology, Botany, Microbiology, Electronics, Mathematics, Physics and Computer Science.
- College provides the internet facility to the faculty department wise and for students through UGC NRC of the college.
- The Remedial classes are arranged by the faculty for weak learners under UGC Sponsored remedial coaching center of the college.

- The teaching aids in the form of teaching models, charts are made available in Botany, Chemistry, Zoology laboratories etc.

**1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalization of the curriculum?**

- The college faculty interacts with beneficiaries through study tours to industries, research bodies and universities.
- The faculty members of Chemistry, Mathematics & Microbiology are working as research guides of SGB Amravati University and other University.
- The guest lectures are arranged by inviting resource persons from Industries and University professors involved in research.
- The college has developed MOU with the following organizations/institutes in the subject Chemistry, Microbiology and Botany.

S.No.	Name of institution /organization
1	Microbiological Society of India, Sub center ,Babasaheb Ambedkar Marathwada University, Osmanabad
2	Adarsh Goseva Evam Anusandhan Prakalp, Mhaispur, Akola
3	Dr.Panjabrao KrishiVidyapeeth, Akola
4	Dr. Hedgewar Blood Bank ,Akola
5	Shri Shivaji College of Arts, Commerce &Science,Akola
6	Vitthal Mushrooms , Amanatpur,Akola
7	Government Public Library, Akola

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.)**

The faculty members of our college participate actively in all meetings /workshops of curricular development to point their valuable suggestions and opinions on the basis of feedback received from different Stakeholders.

The following faculty members of our college have been members of different bodies of S.G.B. Amravati University ,Amravati.

Sr. No.	Name of Faculty	Department	Name of the committee
1.	Dr. V. D. Nanoty	Microbiology /Biochemistry	BOS Member for 2007-12 , 2012-17 & member of u/s 32/5 committee
2.	Dr. P. P. Devhate	Chemistry	Executive Member, Amravati

			University Chemistry Teachers Association
3.	Shri. R. G. Chavan	Electronics	Member, Amravati University Electronics Teachers Association
4.	Dr. S. M. Padhye	Mathematics	Member of subcommittee for restructuring the syllabi of BOS

**1.1.7. Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If „yes“, give details on the process (“Needs Assessment”, design, development and planning) and the courses for which the curriculum has been developed.**

**NO**

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

- College council regularly conducts meetings in which the performance of the students and the achievements of the curriculum objectives are analyzed.
- The departments of all subjects conduct meetings with the faculty members and discuss the progress of the academic and co-curricular activities of the college. The relevant issues regarding curriculum are discussed and necessary steps are taken for improvement.
- Parent Teachers Association meetings are conducted in which students’ performance and necessary steps for improvement are discussed.
- The objectives of curriculum are achieved by conducting Class Tests, Project Assignments, Seminar, Workshops, Industrial Visits.

**1.2 Academic Flexibility :-**

**1.2.1. Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution.**

The department of Microbiology offers add-on courses on Laboratory Technology. The main objectives of the courses are to help the students to get practical knowledge in establishing / working in Pathological Laboratories. Thus the courses do provide employment opportunities for the students while

doing their first degree. This is in agreement with the goals & objectives of the institution. The course details are as follows.

S.No.	Name of the course	Eligibility
1	Certificate course on Laboratory technology (CCLT)	Student of B.Sc.I opting for Microbiology/Biochemistry/Zoology/ Botany as one of the subjects
2	Diploma course on Laboratory technology (DCLT)	Student of B.Sc.II opting for Microbiology/Biochemistry/Zoology/ Botany as one of the subjects
3	Advanced Diploma Certificate course on Laboratory technology (ADCLT)	Student of B.Sc.III opting for Microbiology/Biochemistry/Zoology/ Botany as one of the subjects

**1.2.2. Does the institution offer programs that facilitate twinning /dual degree? If „Yes“, give details.**

The institution is affiliated to SGB Amravati University, Amravati which does not permit either twinning or dual degree course. However the college offers add on courses and certificate courses in addition to regular courses.

**1.2.3. Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.**

The college follows all programs and policies regarding the curriculum designed by the university however there is little academic flexibility. Admission policy of the university provides flexibility in changing the core subject combination on the following grounds.

- Student may get opportunities to change their subject combination by applying within fifteen days from the last date of admission.
- Ranges of core / elective option offered by the university are also offered by the college.
- Choice based credit system and range of subject options has been followed for all PG courses in the university and is therefore followed in the college for PG in Mathematics, Microbiology & Chemistry.
- Courses offered in modular form Nil
- Credit transfer and accumulation facility Nil
- Lateral and vertical mobility within across programs& courses Nil
- Enrichment courses Nil

The college offers following core / elective courses at graduate & Post graduate level.

Sr . No.	Courses	Subjects / subject combination	Admission to degree course	Duration of course
1.	B.Sc (I,II,III)	1. English (compulsory)  2. Marathi / Hindi (Any one subject)  3. Optional subjects (Any one group) <b>P1-</b> Physics, Electronics, Mathematics  <b>P2-</b> Physics, Computer Science, Mathematics  <b>P3-</b> Physics, Computer Science, Electronics <b>P4-</b> Physics, Chemistry, Mathematics <b>P5-</b> Physics, Information Technology, Electronics <b>P6-</b> Physics, Information Technology, Mathematics  <b>B1-</b> Chemistry, Microbiology, Biochemistry <b>B2-</b> Chemistry,	1. Eligibility 12 <sup>th</sup> Science pass  2. Intake capacity 420 +10%.  3. Fee structure as per university norms.  4. Admission pattern on Merit basis & Reservation policy.	3 Years

		Microbiology, Botany		
		<b>B3-</b> Chemistry, Microbiology, Zoology		
		<b>B5-</b> Chemistry, Zoology, Botany		
		<b>B6-</b> Chemistry, Zoology, Bioinformatics		
		<b>B7-</b> Chemistry,Botany, Bioinformatics		
2.	M.Sc (I,II)	1. Mathematics	1. Eligibility-B.Sc with Mathematics as one of the subjects	Admission pattern : merit basis & reservatio n policy
		2. Chemistry	with Chemistry as one of the subjects	
		3. Microbiology	with Microbiology as one of the subjects	
			2. Intake capacity : Mathematics (80)+10% Chemistry (16)+10% Microbiology (20)	
3.	Career oriente d certific ate courses	1. CCLT	Any undergraduate student admitted in the college opting for Microbiology /Biochemistry/Zoolog y/Botany as one of the subjects	
		2. DCLT		
		3. ADCLT		

**1.2.4. Does the institution offer self-financed programs? If „yes“, list them and indicate how they differ from other programs, with**

**reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

Yes, the institution offers following self- financing programs.

1. B.Sc. with Information Technology as one subject
2. B.Sc. with Bio-Informatics as one subject
3. B.Sc. with biochemistry as one subject
4. M.Sc. Chemistry
5. M.Sc. Microbiology

Admission : On the merit basis / First come first serve basis

Curriculum: As given by SGB Amravati University, Amravati.

Fee structure: Decided by the college as per the guidelines of the university and is provided in the prospectus of the college.

Teaching Qualifications : As per the UGC norms

Salary : As per the UGC scale / on fixed pay /Contributory Hourly basis (Remuneration as decided by Government)

**1.2.5. Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If „yes“ provide details of such programs and the beneficiaries.**

Yes, the add-on courses run by the department of Microbiology of this college provide the regional job opportunities to the students while pursuing their first degree. The details of these programs and the beneficiaries are given in the following table.

Sr. No	Name of the Course	2008-2009		2009 - 2010		2010 - 2011		2011 - 2012		2012- 2013		2013-2014	
		Appeared	Passed	Appeared	Passed	Appeared	Passed	Appeared	Passed	Appeared	Passed	Appeared	Passed
1.	CCLT	22	22	21	21	20	20	37	37	27	27	47	47
2.	DCLT	-	-	15	15	08	08	12	12	22	22	20	20
3.	ADCLT	-	-	-	-	08	08	06	06	06	06	-	-

**1.2.6. Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice ? If ‘yes’, how does the institution take advantage of such provision for the benefit of students?**

The affiliating university (SGB Amravati University) permits combination of conventional courses and distance mode of education, however being a full-fledged science college, students are not inclined towards such combinations.

**1.3 Curriculum Enrichment:-**

### **1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programs and Institution's goals and objectives are integrated?**

The college makes several efforts for the "overall development of the students" which is most accepted definition of "Education". This is in tune with the goals and objectives of the college.

The add-on certificate, diploma courses run by the college help the students to develop the skills, to make them employable and to equip them to meet the challenges of life. The goal of the college assures that the students achieve academic excellence along with personal development through project works, seminar by students, field visits, seminar competitions, guest lectures, study tours and several co-curricular activities. The institution encourages the students to take part in several academic activities such as debate competitions, elocution competitions, university level research festival (Avishkar), Science exhibition, seminar competitions etc in which they get color coats/prizes. The activities like seminars by students, group discussions are regular activities of the college. The college also has a career and counselling cell, Equal Opportunity Cell, UGC NRC etc for the benefit of the students.

The institution also contributes to nation building through various service units such as NCC, NSS. The NSS special camp is organized every year in which the college adopts a village. These camps help students to create awareness among the villagers about cleanliness, good health, educating girls, legal advice etc. The institution organizes many social projects like blood donation camp (on 24<sup>th</sup> December every year), "Chauda Tas Abhyas Vikasacha Dhyas" (on 14<sup>th</sup> April every year) etc.

The college runs the sport activity very efficiently under the guidance of Director of Physical Education. The students win on an average 7 -8 color coats and prizes in the games like table tennis, Judo, Karate, Wrestling etc. per year.

### **1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?**

The efforts made by the college to enrich & organize the curriculum to implicitly reflect the experiences of the students are as follows.

- As an affiliated college, feedback through classroom interaction obtained from the students is analyzed by the faculty members in the concerned departments. When the faculty members are invited during curriculum modification, they communicate their recommendations on the basis of their analysis and discussion of the feedback received.

The efforts made to cater the dynamic employment market are as follows.



The curricula are revised regularly by the affiliating university so that the students keep pace with new and emerging knowledge and skills. In the syllabus revision the new title/ concept/ content is in accordance with the changing social & global needs.

At PG in the subject mathematics syllabus of the paper “operations research” has been revised.

Examples:-

- In the subject Chemistry, old procedures in laboratories such as gravimetric analysis etc. were removed and new processes of laboratory work are introduced.
- In the subject Electronics, the topic of Microcontrollers has been introduced at B.Sc. III level.
- In the subject Microbiology, the topic related to ICT and Biostatistics have been introduced at B.Sc. I level.

The syllabus revised in this way enables the students to compete in the global employment market, facing all India level examinations like NET/ SET/.GATE/Banking/MPSC/ UPSC.

### **1.3.3. Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

The efforts made by the college to integrate the cross cutting issues in to the curriculum are as follows.

#### **Gender**

- The college works for women empowerment, gender sensitization, etc through three committees namely Vishakha, Grievance Redressal Cell and Anti ragging cell. The college holds Poster competitions, Essay competitions, Workshop on Women empowerment regarding this issue.
- Despite the shortcomings in the curriculum of some subjects the NSS wing of the college runs the program like “Beti Bachao Abhiyan” anti-dowry movement etc. by which the principles of Human rights and gender equality are impressed in the minds of students of the institution.
- Lady teachers & girl students of the college participate in many programs organized by police department & District collector office regarding rights and law for the girls.
- Physical Education department in collaboration with Grievance Redressal cell organizes self- defense workshops every year for girl students & Lady teaching staff.

- Physical Education department arranges every year physical medical check- up for all the students.
- Grievance Redressal cell organizes regularly hemoglobin check -up camp for girls in college under the guidance of department of Microbiology.

### **Climate change and Environmental Education**

- In the syllabus revision it was decided by the university to make environmental studies as a compulsory foundation paper for all the UG students.
- Two days National Conference on Developing Frontiers Of Physics Astronomy and Space Sciences was held on 24<sup>th</sup> and 25<sup>th</sup> September 2010.
- The college magazine “Pratibimba” of 2013-14 contained the articles written by the students and staff under the theme “Scientific way of protecting the environment”.  
Pratibimba of 2011-12 had the theme “Van Sampada”.
- The microbiology department of our college organized a workshop related to the topic “Pure Water For Good Health”
- Our institution has organized a workshop on sericulture.

### **Human Rights**

- A workshop on “Swami Vivekananda and his Thoughts” was organized for students, teaching & non-teaching Staff.
- College organizes regular programs on Teachers Day(5<sup>th</sup> Sept),Dr.BabasahebAmbedkarMahaparinirwan Din(6<sup>th</sup> Dec) ,Dr.BabasahebAmbedkar birth anniversary (14<sup>th</sup> Apr)etc
- The theme of “Pratibimba” for the year 2010-2011 was “Healthy India”.

### **ICT**

- College organized regularly ICT trainings for non-teaching staff as well as for the school teachers of Akola district region ( Saturdays).

#### **1.3.4 What are the various value-added courses / enrichment programs offered to ensure holistic development of students?**

- **moral and ethical values**
- **employable and life skills**

- **better career options**
- **community orientation**

The college organizes value added enrichment programs time to time to develop skills of the students. The efforts in this regard are as follows.

### **1. Moral & Ethical value:-**

- The students actively participate in the NSS & NCC activities.
- The college conducts value education sessions & talks by eminent personalities especially in the NSS camps organized every year.
- Art of living program by Shri. Shri. Ravishankar is periodically arranged in the college for the students and staff.
- Coaching of Yoga & Pranayama is also a part of the NSS activities of the college.
- A workshop on “Swami Vivekananda & his thoughts” was organized for students, teaching & non-teaching staff.
- The theme of “Pratibimba”, the college magazine for the year 2012 – 2013 was “Yuvashakti”.
- College organizes programs every year on the theme “Value Based Education “. The college has organized workshops on
  1. “Fraternity” (13.10.2010)
  2. “Life Education through Sant Gadge Baba’s dashsutri and Rashtrasant Tukdoji Maharaj’s Gramgeeta” (7.2.2012)
  3. “Moral values, Yes!” (21.12.12 to 24.12.12)
  4. “Education for life and life for nation” (20.2.13)
  5. “How to increase your acceptability” (17.10.14)
  6. “Value Education Program” (7.2.15)

### **2. Employable & Life skills:-**

- The NSS unit of college runs the Environmental awareness campaign.
- The NSS unit of the SGB Amravati University organizes e-learning program in which the students of our college actively participate.

- The students of our college also participated in state level disaster management program at Tejpur (Asam) as well as at Nagpur. The students of the NSS unit constructed a tidal dam as well as soak pit in Yelwan village during NSS Camp.
- The college has a Gym where apart from regular gym activities the girl students are given self- defense training in the form of Judo, Wrestling and Boxing.
- College arranges every year adventure tour

### **3. Better career options:-**

- There is a career & Counselling cell in the college which guides the students.
- The college organized workshops on
  - i) “Career counseling” (12.1.11)
  - ii) “Career management- resume writing and soft skill developments” (18.2.14)
  - iii) “Career opportunities for graduates” (28.1.15)

### **4. Community orientations:-**

The college has NSS unit, NCC unit, red ribbon club to organize and encourage the students to participate in community services. These units regularly organize / participate in different social activities like free medical check- up, lectures on Human rights, Social awareness, anti-dowry awareness by eminent persons in judicial field, voters awareness campaign etc. These lectures are widely attended by the villagers at the place of NSS camp. A street play on “Beti Bachao” as well as a campaign against alcoholism was organized. A sickle cell camp was also organized.

The urban students know the problem faced by the villagers and sensitivity is developed in them towards the social challenges. Survey of ration cards is also done in village adopted for NSS camp.

### **1.3.5. Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

The extensive use of the feedback from different stakeholders is enriching the curriculum as follows.

- As an affiliated college, feedback obtained from the students is analyzed by the faculty members in the concerned departments. When the faculty members are invited during the curriculum revision/

modification, they communicate their recommendations on the basis of their analysis and discussion of feedback received.

- In case of alumni as well as community, feedbacks are collected and their suggestions are always welcome.

The feedback from the employer / industries as well as academic peers is obtained by the affiliating university and is used to enrich the curriculum.

**1.3.6. How does the institution monitor and evaluate the quality of its enrichment programs?**

- The IQAC, Principal and HODs monitor the quality of the enrichment programs through planning and effective implementation.
- Unit tests in the theory and practical are regularly conducted in each subject and the remedial exercise is undertaken i.e. special coaching of weak learners is conducted by the faculty.
- Each program is evaluated through feedback obtained from the students. The collective measures are adopted for its further improvement.

**1.4 Feedback system;-**

**1.4.1 What are the contribution of the institution in the design and development of the curriculum prepared by the university?**

During the curriculum preparation and development SGB Amravati University Amravati always conducts meetings/ workshop coordinating department wise faculty members of its affiliated colleges. In the same way teacher organizations of different subjects also conduct the meeting / workshops for discussion about curriculum and its development.

Sr No	Faculty	Subject	Name of the Meeting	Organization	Date
1	Dr. V. D. Nanoty	Microbiology / Biochemistry	BOS meetings	BOS SGBAU	
2.	Dr. P. P.Devhate	Chemistry	Regional workshop on redesigning of chemistry curriculum at B .B . Science college, Amravati.	Amravati University Chemistry Teachers Association, Amravati	29/4/2012
3.	Dr. P .P.Devhate	Chemistry	Discussion on	Amravati	24/6/201

			Draft Syllabi at Shri. Shivaji Science College, Amravati.	University Chemistry Teachers Association, Amravati	2
4.	Shri.R.G. Chavhan	Electronics	Reforms in Syllabi & Examination of Electronics (Science) in context to local and global needs. At B. B . Science College, Amravati.	Amravati University Electronics Teachers Association, Amravati	22/4/2012
5	Shri. R.G. Chavhan	Electronics	Workshop on scope & Limitation of Syllabus of B.Sc III Electronics at Amolakchand College, Yavatmal	Amravati University Electronics Teachers Association, Amravati	1/9/2012
6	Dr. S. M. Padhye	Mathematics	Subcommittee of BOS for restructuring of PG Syllabus in Mathematics at SGBAU, Amravati.	BOS SGBAU	29/9/2011

**1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on curriculum? If, Yes, how is it communicated to the university and make use internally for curriculum enrichment and introducing changes/ new programs?**

Yes, the College obtains feedback from and stakeholders as follows.

**Students:-**

The college provides questionnaires to students who have to submit them at the completion of the program.

**Alumni:-**

The responses obtained from these feedback forms are discussed in the regular meetings of Alumni Association.

**Industries:-**

The feedback is obtained during regular interactions with industry experts by inviting them for delivering expert talks and during industry visits.

**Academic Peers:-**

By organizing national seminars, conferences and workshops, the academic peers are invited and feedback is obtained.

**Community:-**

Through Parent-teachers association meetings, NSS camps the feedback from community is obtained.

Feedback thus collected are discussed and analyzed in the meeting with the Principal and all heads of the departments. The suggestions thus emerged are communicated to the university through Board of Studies, Academic Council and senate members for refining the curriculum.

**1.4.3 How many programs/ courses were introduced by the institution during the last four years? What was the rationale for introducing new courses / programs?**

**Any other relevant information regarding curricular aspects which the college would like to include.**

During last four years the following new programs are introduced.

<b>Courses (Elective Option)</b>	<b>Year</b>	<b>Rationale</b>
Information Technology	2010- 11	Student Demand High Market Demand High Employability
Bio- Informatics	2010 -11	Interdisciplinary Course More Applicability

<b>Course (P. G.)</b>	<b>Year</b>	<b>Rationale</b>
Chemistry	2010 - 11	Long Time Student Demands High Applicability Higher Studies Opportunities
Microbiology	2011 - 12	Long Time Student Demands High Employability

Higher Studies  
Opportunities



## **Criterion II – Teaching-Learning and Evaluation**

### **2.1 Student Enrolment and Profile**

#### **2.1.1 How does the college ensure publicity and transparency in the admission process?**

The admission committee is fully vigilant and alert to ensure publicity and establish a total transparency in the admission process as follows.

- **Centralized admission system** - The college has centralized admission cell accompanied by the student counseling committee which is entrusted with the job of explaining the information regarding the various programmes and admission procedure to all students and their parents who make enquiries.
- **Prospectus** - The details regarding the college and its admission procedure are published in the prospectus of college. The prospectus provide an updated information about the vision, mission, course curriculum, admission process, required documents, fee structure, fee concession, scholarships, achievements, awards, UGC schemes, faculty details, proposed courses and the rules and regulations of the college.
- **Electronic and print media, website, notice boards** - The advertisements for the admission to various programmes are published in electronic and print media i.e. in local and regional dailies. The details about the admission procedure are also made available on college website and are displayed on notice boards and banners in college campus.
- **Educational fairs** - The college participates in educational fairs where matters related to the admission are explained to the visitors.
- **Admission process** - It is experienced that, applications received for admissions to some programmes are more than the intake capacity of the college and hence for such programmes admissions are made strictly on the **basis of merit**. Whereas for admissions to other

programmes college adopts the policy of “**First come - First preference**” subject to the minimum qualification and statutory reservation as per the rules laid down by Sant Gadge Baba Amravati University, Amravati and Government of Maharashtra.

- The college stick to the scheduled dates for receipt of application and relevant information pertaining to admission as given in prospectus. Transparency in the admission procedure is meticulously observed by the Principal and accordingly informed to various agencies.

**2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.**

The college runs UG, PG, M.Phil., Ph.D., certificate and diploma programmes in various subjects. The process of admission for all these programmes is totally under the control of Principal and Chairman of admission committee and it is according to the rules laid down by Sant Gadge Baba Amravati University, Amravati and Government of Maharashtra. The details are as mentioned below.

- **UG, certificate and diploma programmes** - The UG programmes i.e. B.Sc.-I (B1,B2,B3 and P2,P3) where applications received for the admissions are more than the intake capacity, admissions are strictly done on the **basis of merit** i.e. marks obtained in the last qualifying examination. Accordingly category wise merit lists are prepared by the admission committee, displayed on notice board and students are then admitted to particular programme. For other UG programmes i.e. B.Sc.-I (B5,B6,B7 and P1,P4,P5,P6) along with the certificate programme i.e. C.C.L.T. and diploma programmes i.e. D.C.L.T. and A.D.C.L.T. criterion of “**First come - First preference**” is adopted.

- **PG programmes** - The college runs PG programmes in subject mathematics, chemistry and microbiology. The same criterion of merit is used for these admissions. The admissions to these programmes are done under the observation of Head of respective departments. Separate category wise merit list are displayed and students are admitted in these subjects.
- The categories have been decided by the government on the basis of socio-economic backwardness of the community and the college has to admit the students accordingly.
- **M.Phil. and Ph.D. programmes** - The students are admitted to M.Phil. and Ph.D. programmes in subject mathematics, chemistry and microbiology after passing the qualifying examination and entrance test like “Ph.D. Aptitude Test” conducted by the Sant Gadge Baba Amravati University, Amravati. The students for these programmes are selected on the basis of their performance in personal interview conducted by the supervisor of respective subject, knowledge about the particular area of research, aptitude and preliminary work done by the student. The student in consultation with the supervisor prepare a research proposal i.e. synopsis which is presented before the research recognition committee (RRC) of university and then according to the norms of university he/she is registered and admitted.

**2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

The minimum and maximum percentage of marks for admission at entry level in various UG and PG level programmes offered by the college during the academic session 2014-15 and its comparison with other colleges within the city is as follows.

Sr.No.	Progra mmes	Minimum % of Marks			Maximum % of Marks		
		Shri R.L.T. College of Science, Akola	Shri Shivaji College, Akola	Shankarlal Khandelwal College, Akola	Shri R.L.T. College of Science, Akola	Shri Shivaji College, Akola	Shankarlal Khandelwal College, Akola
<b>UG</b>							
01.	B.Sc.-I	42.15	36.00	37.00	91.84	84.00	79.00
<b>PG</b>							
01.	M.Sc.-I (Mathem atics)	51.77	41.77	---	87.77	69.36	---
02.	M.Sc.-I (Chemist ry)	59.81	52.22	46.37	84.70	78.67	67.14
03.	M.Sc.-I (Microbiol ogy)	62.74	59.00	---	87.62	72.00	---

**2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

Yes, the college has a mechanism to review the admission process and student profiles annually. It is done in following ways.

- **Review of the admission process by Principal, student counseling and admission committee** - Every year at the beginning of the admission process, previous year's criteria of the admissions is discussed in the meeting of the admission committee under the chairmanship of Principal. Heads of the various departments also participate in this discussion.
- According to the percentage of passing in qualifying examinations of Amravati Divisional Board, Sant Gadge Baba Amravati University, Amravati and approach of the students to various programmes during last academic session, if required some modifications are made in the criteria of admissions to make it error free.
- During the period of admissions, every day the review of admissions to various programmes is taken up by the Principal. Major issues are discussed with admission committee members, resolved and the decisions are communicated to the concerned persons for further implementation.
- Depending on the response for admissions to various programmes, if required the seats of that particular programme are decreased or increased. The response of students for admissions is also communicated to the university and accordingly requested to increase the seats of particular programme.
- At the end of session student counseling committee and admission committee takes the review from students about the new subjects and programmes to be started and very soon college starts working for the implementation of that.
- **Review of student profiles by Principal, guardian teacher and faculty members** - In order to give personal attention to students' difficulties and to give moral and emotional support, college appoints a teacher as a guardian for them.
- The activities of a group of students are closely monitored by a guardian teacher and a record of that is maintained. It includes the information like attendance, marks scored in unit tests and class tests,

participation in sports, co-curricular and extra-curricular activities, contact numbers and area of residence of the student etc.

- Teacher guardians meet regularly with students to keep the information about their academic progress and related issues.
- Feedbacks of the students are taken, these are then analyzed and corrective actions are taken. The counseling of students is also done throughout the year.
- The review of results of various examinations, achievements and participation of students in various co-curricular, extra-curricular, games and sports activities is taken by the Principal in monthly staff council meetings and discussed with various members of the college. Steps to be taken for the improvement in all these are also discussed and accordingly implemented.
- The academic records are maintained in the admission register by the academic sections. The attendance and academic performance records are maintained and time to time notified to the students by faculty members.

The outcome of review of the admission process and student profiles and its contribution to the improvement of the process is as follows.

- **Increase in number of admission** - In last three-four years the number of admissions to various programmes is increased. University also permitted the college to admit 10% extra students than the intake capacity of some programmes.
- **New programmes** - The programmes like B.Sc.-Bioinformatics, B.Sc.-IT and M.Sc.-Chemistry which are started from the session 2010-11 and M.Sc.-Microbiology started from the session 2011-12 are the outcomes of the reviews taken and regular discussions held with the students and staff of the college.
- **Admissions on the basis of merit, statutory reservation and choice** - In most of the programmes admissions are done according to the merit. The numbers of seats reserved for the socio-economical backward classes are filled by the candidates from those classes only. Because of the counseling of students during admission process, students get admitted in programmes of their choice, interest and aptitudes.
- **Student potential** - The review of student profiles help in learning the potentiality of students in various activities in addition to academic performance. To such students incentive marks are given for their

participation in co-curricular and extra-curricular activities as per the norms of Sant Gadge Baba Amravati University, Amravati.

**2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the national commitment to diversity and inclusion.**

- 1. SC/ST**
- 2. OBC**
- 3. Women**
- 4. Differently-abled**
- 5. Economically weaker sections**
- 6. Minority community**
- 7. Any other**

With due respect to the value of democracy, social justice, equality, peaceful co-existence and ethics, the strategies adopted to increase/improve access for SC/ST/OBC, women, differently-abled, economically weaker sections and minority community students are as follows.

- **SC/ST/OBC** - The students of SC/ST/OBC and other socio-economic backward classes i.e. VJ/NT/SBC are admitted as per the state government norms and the concession in tuition fees, college fees, scholarships and other benefits are given to them, which ensures equality and social justice.
- **Women** - The college boosts up the women candidates to admit in college by providing the facility of women hostel, girls' common room, separate reading sections in library etc.
- **Differently-abled** - During admissions college ensures the differently-abled students about providing ramps, railing, wheelchairs and if required the class rooms of ground floor. The college staff always gives the top priority and is ready to help the students under this category.
- **Economically weaker sections** - The college helps the economically weaker students through equal opportunity centre (EOC), parent teacher association (PTA) and alumni association by providing study material, uniforms, concession in fees etc. During admissions facility for the payment of fees in installments is also given.
- **Minority community and other** - The college offers reservations to minority community students as per the directions of state and central government. The faculty members of college do the counseling of non-

creamy layer group of students and explain the various benefits of financial and academic facilities they are getting from the college and government.

- The college admission policy is strictly as per the government rules and regulations, which provide better access to various categories of the students.

On the basis of the strategies adopted by the college, the details of the national commitment to diversity and inclusion reflected through the admission policy and student profiles are as follows.

- More than 75% of the students admitted to UG, PG and Ph.D. programmes during the session 2010-11 to 2014-15 are of various socio-economic backward classes and women category. The students of differently-abled, economically weaker sections and minority community are also the part of college.

Session	Programmes	Total no. of students admitted	No. of students admitted of socio-economic backward classes					Women	Differently-abled	Economically weaker	Minority community
			SC	ST	OB	VJ	NT				
2014-15	B.Sc.-I	453	60	7	240	15	18	326	1	33	12
	B.Sc.-	336	51	4	180	19	13	247	0	30	11
	B.Sc.-	227	27	5	114	5	7	175	1	34	7
	M.Sc.-I	124	10	2	63	5	4	91	0	14	12
	M.Sc.-	112	7	1	45	3	5	84	0	10	16
	Ph.D.	0	0	0	0	0	0	0	0	0	0
2013-14	B.Sc.-I	389	68	8	194	9	25	276	0	13	32
	B.Sc.-	262	30	5	135	2	17	186	1	37	9
	B.Sc.-	185	21	5	87	5	7	129	0	27	9
	M.Sc.-I	123	10	1	53	1	7	95	0	12	14
	M.Sc.-	82	5	1	43	0	2	62	0	6	6
	Ph.D.	3	2	0	0	0	1	2	0	0	0
2012-13	B.Sc.-I	324	46	8	163	12	13	224	1	32	26
	B.Sc.-	237	32	8	113	9	9	152	0	23	9
	B.Sc.-	108	9	5	48	3	4	79	0	15	5
	M.Sc.-I	115	7	4	66	1	0	81	0	9	15
	M.Sc.-	48	5	0	27	0	1	39	0	2	4
	Ph.D.	6	2	1	0	0	0	4	0	0	0



2011-12	B.Sc.-I	295	56	5	147	27	195	0	9	20
	B.Sc.-	183	23	5	79	8	119	0	22	9
	B.Sc.-	130	20	9	61	12	71	0	17	6
	M.Sc.-I	97	10	1	53	5	60	0	1	13
	M.Sc.-	36	3	0	15	3	23	0	5	4
	Ph.D.	1	0	0	1	0	0	1	0	0
2010-11	B.Sc.-I	282	59	7	169	16	163	0	25	22
	B.Sc.-	113	20	2	48	8	60	0	13	6
	B.Sc.-	86	14	4	31	4	62	0	12	5
	M.Sc.-I	86	8	0	18	2	86	0	9	18
	M.Sc.-	26	2	0	6	1	12	0	1	2
	Ph.D.	4	0	0	1	0	0	3	0	0

- More than 80% of the girl students admitted in women hostel of the college during the session 2013-14 and 2014-15 are of various socio-economic backward classes.

Session	Total no. of girl students admitted in women hostel	No. of girl students admitted of socio-economic backward classes in women hostel					Differently-abled	Economically weaker	Minority community
		SC	ST	OBC	VJ	NT			
2014-15	30	3	0	13	1	7	0	6	0
2013-14	27	4	0	13	1	5	0	4	0

- More than 75% of the students admitted to UG and PG programmes during the session 2010-11 to 2014-15 were given the concession in college fees as per government rules.
- The following scholarships are given to the students of socio-economic backward classes, women, differently-abled, economically weaker sections and minority community students.
  1. Government of India scholarship to SC/ST/OBC/VJ/NT/SBC category students.
  2. Rajshree Chhatrapati Shahu Maharaj merit scholarship to SC/VJ/NT/SBC category students.
  3. Physically handicapped student scholarship.
  4. Post-matric scholarship to minority students.
  5. Indira Gandhi P.G. scholarship to single girl child.
  6. Rajiv Gandhi national fellowship to Ph.D. students of SC/ST category.
- The following concessions are given to the students of socio-economic backward classes and economically weaker sections.

1. Economically backward class (EBC) concession.
2. Freeship concession to SC/ST/OBC/VJ/NT/SBC category students.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends i.e. reasons for increase/decrease and actions initiated for improvement.**

The details of the various programmes offered by the college during the session 2010-11 to 2014-15 are as described in following tables.

Programmes		Number of Applications	Number of Students Admitted	Demand Ratio
<b>Session : 2014-15</b>				
<b>UG</b>	B.Sc.-I	475	453	1 : 1.05
<b>PG</b>	M.Sc.-I (Mathematics)	170	90	1 : 1.88
	M.Sc.-I (Chemistry)	59	18	1 : 3.27
	M.Sc.-I	27	16	1 : 1.68
<b>Session : 2013-14</b>				
<b>UG</b>	B.Sc.-I	445	389	1 : 1.14
<b>PG</b>	M.Sc.-I (Mathematics)	94	89	1 : 1.05
	M.Sc.-I (Chemistry)	45	18	1 : 2.50
	M.Sc.-I	24	16	1 : 1.50
<b>Ph.D.</b>	Mathematics	---	1	---
	Chemistry	---	1	---
	Microbiology	---	1	---
<b>Session : 2012-13</b>				
<b>UG</b>	B.Sc.-I	347	324	1 : 1.07
<b>PG</b>	M.Sc.-I (Mathematics)	92	82	1 : 1.12
	M.Sc.-I (Chemistry)	35	14	1 : 2.50
	M.Sc.-I	29	19	1 : 1.52
<b>Ph.D.</b>	Mathematics	---	3	---
	Chemistry	---	2	---
	Microbiology	---	1	---
<b>Session : 2011-12</b>				
<b>UG</b>	B.Sc.-I	334	295	1 : 1.13
<b>PG</b>	M.Sc.-I (Mathematics)	66	66	1 : 1
	M.Sc.-I (Chemistry)	50	18	1 : 2.77
	M.Sc.-I	13	13	1 : 1
<b>Ph.D.</b>	Microbiology	---	1	---
<b>Session : 2010-11</b>				

<b>UG</b>	B.Sc.-I	290	282	1 : 1.03
<b>PG</b>	M.Sc.-I (Mathematics)	70	70	1 : 1
	M.Sc.-I (Chemistry)	16	16	1 : 1
<b>Ph.D.</b>	Chemistry	---	2	---
	Microbiology	---	2	---

## 2.2 Catering to Student Diversity

### 2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

The college is sensitive to differently-abled students and caters to the needs of differently-abled students and ensure adherence to government policies in this regards in following manner.

- **Ramps, wheelchairs and railings** - The provision of ramps, wheelchairs for physically handicapped students is made available in various wings of the college as well as library and women hostel. For such students railings are provided to find easy to climb the staircases and go to their respective class rooms and laboratories. If required, the class rooms of ground floor are provided to these students.
- **Special coaching and study material** - The students who suffer from learning disabilities are identified and special coaching is given to them. The study material, notes and question bank are provided to them. The approach of faculty and students of the college in order to cater the needs of differently-abled students is very helpful and co-operative.
- **Special seating arrangement** - The college makes special seating arrangement for differently-abled students in college level unit test, class test examinations and university examinations. These students are also provided with extra time at the time of examinations and allowed to take services of writer with the permission of concern authorities.
- **Priority in co-curricular, extra-curricular activities** - The differently-abled students are encouraged and always given the priority to participate in all types of co-curricular, extra-curricular, games and sports activities.
- The college completely abides by the government policies, rules and regulations regarding the needs of differently-abled students.

### 2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the

**programme? If ‘yes’, give details on the process.**

Yes, before the commencement of the programme college does assess the students’ need in terms of knowledge and skills. The details are as follows.

- **Collection of preliminary information** - Learning to know implies how to learn by developing one’s concentration, memory skills and ability to think. At the time of admissions, the student counseling committee collects the preliminary information about the preferences, areas of interest, choices, likings and aptitudes of the students in various subjects, academic programmes, co-curricular, extra-curricular activities like NSS, NCC, cultural and games and sports. The competency and learning levels of the students are also judged from his/her performance in previous qualifying examination.
- The counseling of almost all students is done by the student counseling committee during the admission process.
- On the basis of above information student counseling committee identifies and evaluates the students and accordingly admitted in particular programme and selected for the activities by the admission committee and concerning authorities.
- **Academic counseling** - For the first year students initial classes are more like the orientation programme, which are meant to familiarize the students to the syllabi of various subjects, scheme of examination and internal assessment marks, various types of co-curricular, extra-curricular and extension activities.
- **Knowledge and skill** - The marks in previous qualifying examination and performance of the students in initial classes reveal the knowledge and skill of them. Some students excel in academic matters whereas others in NSS, NCC, cultural, games and sports etc. Accordingly the students are involved in these activities with special attention of the faculty members towards the overall development of the students.

**2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?**

To bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice is the duty of college. The

college has taken several measures to enable the students to catch up with the fast developments in syllabi of various subjects. Some of the strategies adopted by the college in this regard are as mentioned below.

- **Identification of slow and fast learners** - Once the programme commences slow and fast learners are identified on the basis of classroom participation, unit test and class test examinations.
- **Extra classes and tutorials** - The faculty members of various departments adopt strategies like academic counseling, extra classes and tutorials for the slow learners so that they can cope with the programme in which they are enrolled. Easy learning notes are provided to them. Extra classes are arranged for late admitted students.
- **Spoken English classes** - It has been observed that the communication skill of the rural students is weak, so the college has a strategy to expose such students to English speaking through special arrangement. Spoken English classes are regularly arranged by language department of the college.
- **Workshops, seminars, group discussions, research festivals and scientific projects** - The students are encouraged to participate in some enrichment programmes like workshops, seminars, group discussions, research festivals and scientific projects to improve the student's mindset and motivate them to do some novel, innovative and creative.
- **Aptitude tests and guest lectures** - The special aptitude tests and concept tests in various subjects along with the value based lectures of various eminent personalities, academicians, socialists, industrialists are also organized by the college.
- **Remedial, NET/SET, MPSC/UPSC coaching** - The remedial coaching is given to the students along with the NET/SET and MPSC/UPSC entry-in services classes. About 35% of the students admitted to the remedial coaching passed in their university examinations.
- **Bridge/Add-on courses** - The add-on certificate programme i.e. C.C.L.T. and diploma programmes i.e. D.C.L.T. and A.D.C.L.T. are also run by the college to bridge the knowledge gap of students.
- **Study tours, industrial visits and field work** - The experimental learning through study tours, industrial visits and field work is also increasingly practiced in various departments. During this interactive talks are delivered by educational and industrial executives which helps to bridge the knowledge gap of students.

#### **2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

The college sensitizes its staff and students regarding the crucial issues such as gender bias and creates awareness to maintain and sustain a healthy environment of college. The college leaves no stone unturned in creating awareness of such issues.

- **Gender** - The college provides equal opportunity to ladies and gents for all the activities and processes which include co-curricular, extra-curricular activities like NSS, NCC, games and sports, deputation to the courses, programmes, higher studies, appointments, committees, placements etc.
- The college invites guest speakers to talk and initiate discussion with its faculty on gender related issues. The equal opportunity centre of the college has organized workshop on “**Fraternity**” to highlight such issues to both students and staff. The programme for the women empowerment “**Jagar Janivanchha**” was also organized.
- The college has VISHAKHA, anti-ragging, code of conduct and grievance redressal committees to prevent any untoward incidents of ragging and sexual harassment among the student and staff. Eve teasing is strictly prohibited in college campus.
- **Inclusion** - The important national days are celebrated to create social and civic sense in students and promote inclusiveness and patriotism. The disabled students too are especially monitored and assisted. Slow learners are given special attention and helped to bridge the knowledge gap.
- **Social environment** - The college arranges the various social activities to maintain good social environment in the campus. The social and economically backward sections are integrated into the college community through various promotional measures like scholarships, freships and other incentives. Student and staff have to wear uniform with given stipulations which help to iron out inequalities among them.
- The college celebrates teachers day, science day where students and teachers can interchange the role of each other and put forth their ideas in this regards.

#### **2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

The college identifies and responds to special educational/learning needs of advanced learners in following manner.

- **Academic assessment** - Through the assessment of classroom performance and performance in unit test, class test examinations, question-answer sessions, discussions and past academic record, the students with advanced learning capabilities are identified.
- **Expert's lectures** -The frequent interactions of staff members with such students are arranged. For these students, expert's lectures are organized in various departments so that they can get advanced knowledge. During the session 2010-11 to 2014-15 total 57 guest lectures are organized by the various departments.
- **Library and internet resources** - The advanced learners are encouraged to learn more and know more for the up gradation and advancements of their knowledge by using library and internet time to time and by providing the additional text books, reference books, magazines, journals, question bank etc. Addresses of relevant educational website are given to the students.
- **Infrastructural facilities** - The virtual classrooms, separate P.G. classrooms, laboratories with advance equipments and instruments, well furnished auditorium equipped with LCD display and audio-visual accessories are the other measures rigorously implemented in the college for the advancement such students.
- **Research/academic guidance** - These students are encouraged to participate in the conferences, workshops, research festivals like "Avishkar", guided to present the research articles/papers and prepared for seminar and quiz competitions.
- **Preparation for competitive examinations and higher studies** - The advanced learners are encouraged to prepare for competitive examinations through the UGC schemes of coaching classes for MPSC/UPSC entry-in services, NET/SET preparation. These students are motivated to pursue higher studies and also encouraged to participate in value added courses and content beyond syllabi programmes.
- **Participation in co-curricular and extra-curricular activities** - The advanced learners are motivated not only to attain the higher grades but also to excel in various co-curricular and extra-curricular activities that contribute to the shaping of their artistic skill, intellect, creativity, leadership skills, research acumen etc.

The outcomes of such efforts are reflected in the merit lists published by the university and the results of various types of examinations and

activities. The details of the session 2010-11 to 2014-15 are as given below.

<b>Achievements</b>	<b>2014-15*</b>	<b>2010-11 to 2013-14</b>
No. of students secured position in the merit lists of Sant Gadge Baba Amravati University, Amravati	---	9
No. of students selected for national level research festival - Anvention	2	0
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students participated in state level research festival - Avishkar	5	6
No. of students participated in university level research festival - Avishkar	6	11
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students of games and sports and participated in state and national events	5	19
No. of students of NSS, NCC and Youth Festival participated in state, national and international events	---	12

\* Till January 2015

**2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

The college collects, analyzes and uses the data and information on the academic performance of the students at risk of drop out as described below.

- **Performance in college examinations** - The college conducts the unit test and class test examinations prior to the annual and semester end examinations of Sant Gadge Baba Amravati University, Amravati and on the basis of the performance in these examinations the students who are weak in their studies and performing below the average are identified.
- **Analysis of university examination results** - The college also analyses the results of examinations conducted by Sant Gadge Baba Amravati University, Amravati. The teachers of respective sections and the teacher guardians keep with them the data of all students about



their academic and overall performance.

- **Teacher guardian scheme** - The Principal of the college conducts regular meetings with teacher guardians to obtain the data about academically and economically weak students. The teacher guardians interact regularly with students assigned to them and find out the academic performance of students and probable reasons for the same. He/she co-relates the results with the categories of the students viz. disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.

The corrective measures are taken for the students of disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. at risk of drop out are as follows.

- **Counseling of students** - The college counsel physically challenged students and provides solution to the particular demand of students which includes location, movement and any other special needs.
- The counseling about the special facilities, reservations and scholarships offered by government and college is also done.
- The college creates the awareness among these students about the employment opportunity and the higher studies.
- The college attempts to find out inherent skills in these students and motivates them to excel in the related areas.
- **Counseling of parents and guidance to the students** - The teachers counsel to parents of slow learners regarding improvement in the performance of their ward. The attempts are made by the teachers to teach them individually. Teachers guide slow learners with the help of remedial coaching, suitable projects, seminars and paper presentation etc. The specially developed question bank and assignments are also made available to these students.
- **Academic and financial support** - The college helps these students through tutorial classes, practical demonstrations, small group class tests, educational tours, industrial visits, delivering simple summary of the lecture, using teaching aids, charts, models, providing question bank etc. Financial support to economically weaker students is given in the form of concession in college fees, providing books and other study material.

## **2.3 Teaching-Learning Process**

### **2.3.1 How does the college plan and organize the teaching, learning and**

**evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)**

The college plans and organizes the teaching, learning and evaluation schedules as mentioned below.

- **Academic calendar** - At the beginning of the academic session Principal holds meeting with the staff members in which different committees are formed and the academic calendar as per the guidelines of Sant Gadge Baba Amravati University, Amravati is prepared. This calendar is published through the departmental notice boards, prospectus, teachers' diary and college website. The academic calendar is also conveyed to the students at the time of admission and during Principals address to the students at the beginning of session. The minimum 75% attendance of each student in classes is the compulsory requirement of each programme.
- **Teaching plan** - Moreover, Head of the departments hold meetings with the faculty members of their department and the syllabi of different subjects are discussed in detail. Each department frames the teaching plan for the year and accordingly course allocation i.e. distribution of theory and practical classes is done. The annual plan of the individual teaching is also prepared by each faculty member and it is seriously followed so as to complete the syllabus within reasonable time.
- **Teachers diary** - Individual teaching plan is the compulsory part of teachers diary. Every faculty has to maintain the teachers diary and accordingly he/she has to write the details of theory and practical classes engaged every day along with the other academic activities.
- **Time table** - The time tables of theory and practical classes as well as other academic activities and examinations are prepared meticulously and notified to the students well in advance through notice boards of different departments.
- **Study material** - The study material like reference books, notes of various subjects, practical booklets, question bank, question papers of previous university examinations etc. are provided to the students during the due course.
- **Curriculum based activities** - Throughout the session, question-answer sessions, seminars, group discussions, projects are conducted by each department. The tutorial classes are also held regularly for the students in order to impart more knowledge and skill.
- **Library and internet facilities** - The students are encouraged to use the

library facility effectively as ready reference of study material. The internet facility is also provided to the students to download the material and information related to syllabus, seminars, projects etc.

- **Test examinations** - In each session college conducts two class test examinations prior to the examination of Sant Gadge Baba Amravati University, Amravati for both UG and PG programmes. The unit tests, objective type tests and test practical examinations are also arranged separately by each department after the completion of teaching of syllabus of particular unit.
- **Result analysis and evaluation** - The results of these examinations are published, discussed in detail and are analyzed at department as well as college level. The answer books are shown to the students and scheme of evaluation is explained to them. The model answers are discussed with the students. Besides these, presentation of students in seminars, projects, group discussions etc. in the relevant subjects also help in monitoring the performance of students before the university examinations.
- The Principal holds regular meetings with faculty members to review the progress in teaching and learning of staff and students respectively.

### **2.3.2 How does IQAC contribute to improve the teaching-learning process?**

The IQAC plays a role of a general academic advisor to the college and it is headed by the Principal. Majority of the members of the cell are Heads of the various departments and experienced teachers implying thereby a constant availability of fund of experience and knowledge.

- **Schemes and plans** - Before starting the session, new schemes and plans are put forward by the departments and administrative committees to the Principal and IQAC, which are studied, refined and then approved from the governing body.
- The IQAC in its first meeting gives detail programme about the teaching-learning process to be modified and implemented effectively with the help of modern teaching and learning aids in class room and laboratories. IQAC makes a record of the innovations and use of modern techniques in process of teaching-learning by the faculty members and accordingly every year the necessary changes are conveyed to the Principal.

The IQAC contributes to improve the teaching-learning process with academic, research and knowledge resource extension in following manner.

- **Conferences, workshops and seminars** - The IQAC of college initiates the regular organization of conferences, workshops and seminars for the students and staff. The details are as follows.

**Session: 2014-15**

1. Workshop on "Spectroscopic and stereospecific perspectives of chemistry" was organized on 2<sup>nd</sup> Oct. 2014.
2. Seminar on "How to increase your acceptability" was organized on 17<sup>th</sup> Oct. 2014.
3. Workshops on "Carrier opportunities for graduates" and "Role of stake-holders in internal quality assurance cell and NAAC" were organized on 28<sup>th</sup> Jan. 2015.
4. Online "Spoken-tutorial workshop" was organized in association with IIT, Bombay on 30<sup>th</sup> Jan. 2015.
5. Workshop on "Value education" was organized by The B. G. E. Society, Akola on 7<sup>th</sup> Feb. 2015

**Session: 2013-14**

1. Microbiology student's summit on "Pure water for better health" was organized on 10<sup>th</sup> Oct. 2013.
2. Workshop on "Career management - resume writing and soft skill developments" was organized on 18<sup>th</sup> Feb. 2014.

**Session: 2012-13**

1. Workshop on "Moral values, Yes!" was organized on 21<sup>st</sup> to 24<sup>th</sup> Dec. 2012.
2. Workshop on "Education for life and life for nation" was organized on 20<sup>th</sup> Feb. 2013.
3. Seminar competition on "Environment awareness" was organized on 11<sup>th</sup> Mar. 2013.

**Session: 2011-12**

1. Workshop on "Life education through Sant Gadge Baba's dashsutri and Rashtasant Tukadoji Maharaj's gramgeeta" was organized on 7<sup>th</sup> Feb. 2012.
2. Seminar competition on "Green chemistry" was organized on 28<sup>th</sup> Feb. 2012.

**Session: 2010-11**

1. National conference on "Developing frontiers of physics, astronomy and space sciences" was organized on 24<sup>th</sup> and 25<sup>th</sup> Sept. 2010.
2. Workshop on "Fraternity" was organized on 13<sup>th</sup> Oct. 2010.
3. Workshop on "Sericulture, training and guidance" was organized on 16<sup>th</sup> Dec. 2010.
4. Workshop on "Career counseling" was organized on 12<sup>th</sup> Jan. 2011.

- **Library and internet facilities** - The computerization of library facilities is done. The network resource centre (NRC) is established in library with INFLIBNET educational sources of UGC and Government of India. The internet connections with broadband facilities are made available in all the departments, library and administrative office. The WI-FI network is also established in some specific areas.
- **Video conferencing, webinar** - To give a boost to the capacity of learning video conferencing with national experts is also conducted in the college. "Webinar on modern techniques in microbiology" was conducted on 5th September 2014 and during this Dr. A. M. Deshmukh, Dr. Babasaheb Ambedkar Marathwada University, Sub-Centre, Usmanabad was interacted with the students.
- **Co-curricular activities** - The co-curricular activities like guest lectures, seminars, group discussions, aptitude tests, concept tests, paper presentation, projects based on the syllabus are conducted by various departments for the students.
- **Educational study tours and industrial visits** - The educational study tour and industrial visits of the students are also arranged every year to make the teaching more effective. The details are as follows.

Session	2014-15*	2013-14	2012-13	2011-12	2010-11
No. of guest lectures organized	8	20	16	6	7
No. of UG students who delivered the seminars	950	1250	716	371	246
No. of PG students who delivered the seminars	135	159	72	12	23
No. of educational study tour and industrial visits arranged	3	8	12	7	2

\* Till January 2015

- **Guest lecturers** - The guest lecturers of following eminent personalities have been organized.
  1. **Dr. Devyani Khobragade**, IFS, Government of India, New Delhi.
  2. **Dr. S. K. Pande**, Vice-chancellor, Pandit Ravishankar Shukla University, Raipur.
  3. **Mr. Kith Philip**, Principal, Institute of Hospitality Management, Research and Development (IHMRD), Pune.

4. **Dr. R. V. Gawai**, J. C. Bose National Fellow, Tata Institute of Fundamental Research (TIFR), Mumbai.
5. **Dr. H. M. Meshram**, Sr. Principal Scientist, Discovery Laboratory, Indian Institute of Chemical Technology (IICT), Hyderabad.
6. **Dr. P. N. Pabrekar**, Vice-Principal, Kelkar Vaze Mahavidyalaya, Mumbai.
7. **Mr. Madan Jungare**, Research Scholar & DAAD Fellow, University of Konstanz, Germany.
8. **Dr. Jaydeep Malviya**, CEO-Solar Thermal Federation of India, Pune.
9. **Dr. M. G. Bodhankar**, Dean, Faculty of Science, Bharti Vidyapeeth, Pune.
10. **Dr. A. M. Deshmukh**, Dr. Babasaheb Ambedkar Marathwada University, Sub-Centre, Usmanabad.
11. **Dr. L. J. Paliwal**, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
12. **Dr. B. N. Berad**, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
13. **Dr. P. R. Thorat**, Shivaji Mahavidyalaya, Barshi.
14. **Dr. P. S. Wakte**, Dnyanopasak College, Parbhani.
15. **Dr. M. L. Kurtadikar**, J. E. S. College, Jalna.
16. **Mr. Sanjay Raghtate**, Director, Oxford Speaker Academy, Nagpur.
17. **Dr. Hemant Joshi**, Children Specialist, Mumbai.
18. **Mr. Girish Tilak**, Director, Resume Consultancy, Mumbai.
19. **Ms. Mansi R. Jain**, Yoga Therapist, Mumbai.
20. **Dr. N. S. Chandan**, Siddharth College, Mumbai.
21. **Ms. Priyanka Phulekar**, Co-ordinator, World Alliance for Youth Empowerment (WAYE), Bangalore.
22. **Dr. V. S. Jamode**, Ex-Pro-Vice-chancellor, Sant Gadge Baba Amravati University, Amravati.
23. **Dr. Nareshchandra Kathode**, Director, Dr. Punjabrao Deshmukh IAS Academy, Amravati.
24. **Dr. G. N. Vankhede**, Sant Gadge Baba Amravati University, Amravati.
25. **Mr. A. S. Wankhade**, Govt. Vidarbha Institute of Science and Humanities, Amravati.
26. **Dr. W. S. Marathe**, Shri Brijlal Biyani Science College, Amravati.
27. **Dr. S. P. Kulkarni**, Adarsh Mahavidyalaya, Dhamangaon (Rly).
28. **Dr. P. R. Mandlik**, Shri Shivaji Science College, Amravati.
29. **Prof. D. S. Khaire**, Govt. Vidarbha Institute of Science and Humanities, Amravati.

30. **Dr. H. S. Chandak**, G. S. Science, Arts and Commerce College, Khamgaon.

31. **Dr. Uddhav Gadekar**, Socialist, Akot.

32. **Swami Jyotiswarupananda**, Editor, Jeevan Vikas, Nagpur.

33. **Dr. Shantaramji Bute**, Principal, Govt. College of Education, Akola.

34. **Dr. P. S. Pande**, Shankarlal Khandelwal College, Akola.

35. **Dr. M. V. Shirbhate**, Shankarlal Khandelwal College, Akola.

36. **Mr. Narayan Ingle**, District Counselor, Government Hospital, Akola.

37. **Dr. Nitin Oke**, Director, Kutuhal, Akola.

- **Participation in science projects and research festivals** - On the eve of national science day every year on 28<sup>th</sup> February, college organizes the science project competition and exhibition "Science-Pundit" for the students. The students are encouraged to participate in workshops, seminars, research festivals like "Avishkar". The details of the session 2010-11 to 2014-15 are as follows.

<b>Events</b>	<b>2010-11 to 2014-15</b>
No. of students selected for national level research festival - Anvention	2
No. of students participated in state level research festival - Avishkar	11
No. of students participated in university level research festival - Avishkar	17

- **Slow and fast learners** - Slow and fast learners in each class are identified and extra classes for these students are arranged in each session.
- Every year on the occasion of birth anniversary of Bharatratna Dr. Babasaheb Ambedkar a programme of "14 Tas abhyas vikasacha dhyas" is arranged. The students and staff of the college participate in this programme by studying 14 hours in a day.
- **Educational material** - The educational material is made available by the college through IQAC to the poor and needy students.
- **Minor and major research projects** - The IQAC encouraged faculty members to participate in research oriented work, programmes and to publish that in journals of national and international repute. Several research projects are sanctioned by the UGC during the session 2010-11 to 2013-14 and some of them are completed. The details are as follows.

<b>Research Projects</b>	<b>Status</b>	<b>Number</b>	<b>Grant utilized/sanctioned</b>
Minor research projects	Completed	4	Rs. 3,60,000/-
	Ongoing	6	Rs. 11,20,000/-

Major research projects | Ongoing 1 Rs. 9,79,800/-

- **Review of teaching-learning process** - For enhancing the teaching-learning process, IQAC insists the faculty members to use audio-visual aids. Feedback from various stakeholders are also obtained to assure the teaching-learning.
- The IQAC takes review of university and UGC guidelines about the teaching-learning. It also interacts with renowned institutes, gets the best practices and shares the same with students and faculty.
- **Academic staff development** - The IQAC motivates the faculty members to attend the orientation programmes, refresher courses, short term training programmes and syllabus based talks regularly. The details are as given below.

Session	2014-15*	2013-14	2012-13	2011-12	2010-11
No. of orientation programmes attended by the faculty	0	0	5	4	2
No. of refresher courses attended by the faculty	2	5	7	1	0
No. of short term training programmes attended by the faculty	1	0	0	2	0

\* Till January 2015

### 2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

Though the other stakeholders in the system of education followed by the college are important, they are not regarded above the students. At our college students are at the centre of all endeavors.

The learning is made student centric by adopting variation in teaching methods suited to the learning abilities of the students in following manner.

- **Conceptual learning** - In the classes, lectures are delivered with the aim that average students shall be able to assimilate the concept. For the average students challenging assignments are given. The remedial coaching is prescribed for below average students.
- **Interactive and collaborative learning** - The various methods that are adapted by the college to encourage interactive and collaborative learning are student seminars, group discussions, objective type aptitude and concept test examinations, guest lectures, case studies and



research projects, film shows, use of audio-visual aids, study tours and industrial visits.

- The college has constituted various student organizations like ZEBRA, MICRANS within the departments, where the students take initiatives in organizing subject related activities. This helps in collaborative learning among the students.
- **Independent learning** - The every department of college encourage the independent learning through oral questioning, providing question bank, class tests, library referencing, individual assignments, paper presentations and various competitions. The computers, additional library and laboratory facilities are made available to students as per their requirement for carrying out the project work.
- **Representation of students** - Every year at the beginning of session, college constitute the student representative council (SRC). The members of this council actively participate in various curricular, co-curricular and extra-curricular activities of the college. The annual college magazine "Pratibimb" and wall magazines of various departments provides the platform for students to explore their ideas and creativity in the field of science and technology, literature, social activities etc.

The support structures and systems available for teachers are as follows.

- **Teaching methods and ICT technology** - The teachers have complete autonomy during teaching and are free to choose the appropriate method of teaching to execute from various available methods. The ICT is increasingly incorporated into the teaching-learning exercise. The audio-visual aids, OHP and LCD projectors, laptops, desktops, teaching models, charts are available in each department.
- The teachers are encouraged to take part in conferences, workshops, seminars and training programmes that are intended to improve the professional skills.
- **Infrastructural facilities** - The library and laboratories are well furnished, managed and highly equipped. The infrastructure is constantly upgraded to meet the growing academic needs. The college library has UGC approved network resource centre (NRC). The library is equipped with INFLIBNET educational sources of UGC and Government of India.

#### **2.3.4 How does the institution nurture critical thinking, creativity and**

### **scientific temper among the students to transform them into life-long learners and innovators?**

To transform the students into life-long learners and innovators, the college has to nurture critical thinking, creativity and scientific temper among the students along with the course of teaching. It is done in following ways.

- The college regularly organizes various conferences, workshops, seminars, group discussions, guest lectures and skill development programmes for the students.
- **Participation in research festivals** - The students are encouraged to participate in the conferences, workshops, seminars and research festivals like "Avishkar" and are guided to present the research papers and articles.
- The college provides all necessary facilities that are required for curriculum based projects and dissertations.
- **Science project competition** - On the eve of national science day every year on 28<sup>th</sup> February, college organizes the science project competition and exhibition "Science-Pundit" for the students.
- **Study tours, industrial visits, lectures and seminars** - The educational study tour and industrial visits of the students are arranged every year to nurture critical thinking and to develop the scientific temper amongst them. Lectures, seminars and talks of eminent persons on contemporary issues are organized in which students get a chance to explore the new ideas and to listen the expert views.
- **Annual college magazine and wall magazines** - The annual college magazine "Pratibimb" and wall magazines of various departments provides the platform for students to explore their ideas and creativity in the field of science and technology, literature, social activities etc., articulate their thoughts and sharpen the linguistic as well as artistic skills. Besides providing an opportunity to publish their creation, the magazines also involves them as student editors.
- **Sky Observation Club** - The college has "Sky Observation Club". It is an initiative by the college to develop scientific temper, interest in the field of astronomical sciences and to make the students creative and innovative.

The details are as in Section-2.3.2.

### **2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? eg: virtual laboratories, e-learning resources from National Programme on Technology Enhanced**

**Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education etc.**

The college has adequate infrastructure and provides all the necessary facilities and advanced technologies to the students and staff to make the teaching-learning experience more effective. The facilities available and the technologies used in the college are as follows.

- **ICT technology and e-learning resources** - The faculty makes the maximum use of ICT technology, e-learning resources like computers, mobiles, smart phones, OHP, LCD projectors, pen drive etc. to enhance the use of modern resources to uplift the teaching-learning process.
- **Laboratories and research facilities** - All the laboratories in the college are well furnished and highly equipped for effective practical teaching and research oriented results.
  1. No. of laboratories : 19
  2. No. of recognized research laboratories : 02 (Chemistry, Microbiology)

and department : 01 (Mathematics)

- **Sophisticated equipments and instruments** - Ultrasonicator, U.V.-Visible and visible spectrophotometers, Auto-analyser, Soxhlet apparatus, Trinocular and binocular research microscopes, Flame photometer, Colorimeters, pH-meters, Water-de-ionizer, High precision melting point apparatus, Digital storage oscilloscopes, Cathode ray oscilloscopes, Audio frequency generators, Colour TV trainer, Desktops, Laptops, printers, LCD projectors, Telescope, Cameras etc.
- **Virtual class rooms** - The college has well equipped virtual class rooms with all essential audio-visual aids for the purpose of seminars, guest lectures, power point presentations, film shows, open defense viva, virtual lectures etc.
- **Network resource centre, e-books, e-journals, INFLIBNET sources** - The college library has UGC approved network resource centre (NRC), where students and faculty access the internet services. The wide range of e-books and e-journals are also accessed free of cost. The library is equipped with INFLIBNET educational sources of UGC and Government of India.
- **Internet** - The internet connections with broad band facilities are available

in all departments, laboratories, library and administrative office. The WI-FI network is also established in some specific areas for accessing the e-learning resources.

- The practicals with computer simulation are conducted in various laboratories and departments.
- **Video conferencing facilities** - To give a boost to the capacity of learning video conferencing with national experts is also conducted in the college.
- **Live telecast** - On the occasion of teachers day live telecast of interaction of Honorable Prime minister Narendra Modi was arranged on 5th September 2014.

### **2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

The students and faculty are exposed to advanced level of knowledge and skills through the following activities.

- **Blended learning** - The college organizes the guest lectures, workshops on inter-disciplinary topics which are useful for the students and faculty of various subjects. Blended learning is also incorporated in practical sessions for studying the common laboratory techniques, performing computer simulated experiments and doing the research work.
- **Expert lectures, seminars, study tours and industrial visits** - Lectures, seminars and talks of eminent persons on different subjects are organized in which students get a chance to explore the new ideas and to listen the expert views. The educational study tour and industrial visits are arranged every year to exposed the students and faculty to advanced level of knowledge and skills.
- **Conferences, workshops and seminars** - The college regularly organizes the conferences, workshops and seminars for the students and staff to refresh and update their knowledge. This also helps them to collect the information and exchange the ideas about the latest developments in various fields.
- **Co-curricular activities** - The co-curricular activities like seminars, group discussions, aptitude tests, concept tests, paper presentation, projects based on the syllabus are conducted by various departments for the students.
- **Research work** - The college encourages faculty members to participate

in research oriented work, programmes and to publish that in journals of national and international repute.

- 10 minor research projects and 1 major research project are sanctioned by the UGC during the session 2010-11 to 2013-14.
- **Academic staff development** - The college motivates faculty to attend the orientation programmes, refresher courses, short term training programmes and syllabus based talks regularly.
- **Network resource centre and INFLIBNET sources** - The computerization of library facilities is done. The network resource centre is established in library with INFLIBNET educational sources.
- **Science projects, workshops and research festivals** - The college organizes science project competition and exhibition "Science-Pundit" for the students. The students are encouraged to participate in workshops, seminars, research festivals like "Avishkar".
- The news papers, scientific journals, magazines are used on daily basis to keep track of the latest information in surrounding fields. The recent developments in the field of science education are also displayed through the wall magazines of various departments.

The details are as in Section-2.3.2.

### **2.3.7 Detail (process and the number of students\benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/ academic advice) provided to students?**

The details about the academic, personal and psycho-social support and guidance services provided to students by the college are as follows.

- **Academic counseling** - The college has student counseling committee. At the time of admissions, this committee collects the information about areas of interest, choices, likings and aptitudes of the students in various subjects, academic programmes, co-curricular, extracurricular and games and sports activities. The competency and learning levels of the students are also judged from their performance in various activities and examinations.
- **Personal support** - The personal support is provided to the students by college in the form of educational material, guidance about various competitive examinations, scientific projects, paper presentation etc. The students are also get benefitted by support and co-operation of the alumni and parent-teacher association.

- **Psycho-social support** - NSS, NCC and sports activities spread the social and ethical awareness among students and provide psycho-social support to them.
- **Professional counseling** - The career guidance cell of college does professional counseling of the students. It helps the students for facing the interviews and gives handy tips. The faculty members also guide the students as per the need.
- **Mentoring and academic advice** - The college has teacher-guardian scheme and a batch of around fifty students is allotted to each faculty member. The faculty members guide the students on academic matters, personal problems and provide psycho-social support with quasi-parental relations with students.
- In the practical classes mentoring through intimate interaction of the students with the teachers at the personal level is done.
- Mentoring of the students is done through the tutorial classes in various subjects. The tutorial system is in practice from the very beginning. A group of around 25 students is assigned to the tutor.
- The student representative council and grievance redressal cell of college helps the students at personal level and provides psycho-social support.

The benefits and the outcomes of these concerned efforts during the session 2010-11 to 2014-15 are as follows.

<b>Achievements</b>	<b>2014-15*</b>	<b>2010-11 to 2013-14</b>
No. of students secured position in the merit lists of Sant Gadge Baba Amravati University, Amravati	---	9
No. of students selected for national level research festival - Anvention	2	0
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students participated in state level research festival - Avishkar	5	6
No. of students participated in university level research festival - Avishkar	6	11
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students of games and sports and participated in state and national events	5	19
No. of medals/prizes achieved by the students in university level games and sports events	7	39
No. of students participated in state/national level	2	22

quizzes, aptitude tests, paper/poster presentations		
No. of prizes achieved by the students in university level seminars, quizzes, paper/poster presentations	4	29
No. of students of NSS, NCC and Youth Festival participated in state, national and international events	---	12
No. of students selected as the member of student representative council (SRC) of Sant Gadge Baba Amravati University, Amravati.	1	2
No. of prizes achieved by the students in intercollegiate elocution, debate and essay competitions	5	18
No. of state/national level awards/fellowships received by the students	---	3
No. of students achieved prizes in science project competition - Science Pundit	---	2
No. of students selected for inspire scholarship of Rs. 4,00,000/- of Govt. of India	---	5
No. of students achieved prizes in sugam sangeet competitions	---	2

\* Till January 2015

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

The details of innovative teaching approaches/methods adopted by the faculty during the last few years are as follows.

- **ICT technology and e-learning resources** - The faculty members use desktops, laptops and LCD projectors regularly in the classes and teach the curriculum through power point presentations using ICT techniques and internet facilities. The faculty makes maximum use of ICT technology, e-learning resources like mobiles, smart phones, pen drive etc. to uplift the teaching process.
- **Teaching tools** - The faculty members use models, charts, video clips, films and other audio-visual supplements as teaching tools to present the content in the syllabus. The practicals with computer simulation are conducted in various laboratories and departments. Special classes for the slow and fast learners are arranged as per the requirement.
- **Question bank** - The faculty members prepare question bank for the students.

- **Seminars, group discussions and aptitude tests** - For conceptual understanding of the subject, student seminars, group discussions, objective type aptitude and concept test examinations, question-answer sessions etc are arranged.
- **Field work, study tours and industrial visits** - The experimental learning through field work, participation in science exhibition, study tours and industrial visits is also increasingly practiced.

The college sincerely encourages and supports the faculty members to adopt new and innovative approaches which help in enhancement of teaching methods.

- **Conferences, workshops and seminars** - The faculty members are encouraged to attend the national and international level conferences, workshops, seminars and training programmes that are intended to improve the professional skills and are provided with financial assistance by college.
- **Liberty to purchase** - Whenever any new grant is available, the authority asks for proposals from the departments for utilization of the funds. The departments are given full liberty to choose equipments, software's and materials to be purchased.
- **Library and laboratory facilities** - The computers, laptops, software's, additional library and laboratory facilities are made available to the faculty as per their requirements.
- The facilities like well equipped research laboratories, virtual class rooms, network resource centre, e-books, e-journals etc. are available for faculty members to keep pace with all developments in the modern teaching.

The impact of all these innovative approaches is that, the students on the whole have become independent and confident learners. The faculty and students explore library and other learning resources more frequently and independently.

### **2.3.9 How are library resources used to augment the teaching-learning process?**

The library resources are the keys to be used to augment the teaching-learning process and are used in following manner.

- **Well furnished, fully computerized library** - The college has a well furnished, fully computerized library having 32,177 books including text books and reference books, 14 journals and 34 periodicals of various areas. There are many old and rare books also.



- **Timings** - The college library remains open from 7.30 am to 6.30 pm on every working day.
- **Bar-coding, network resource centre, e-books/journals** - The computerization of library facilities is done along with bar-coding. The college library has UGC assisted network resource centre (NRC), where faculty and students access internet services. The wide range of e-books and e-journals are also accessed free of cost.
- **INFLIBNET sources** - The library is equipped with INFLIBNET educational sources of UGC and Government of India for sharing of library and information resources and services among academic and research institutions.
- **N-LIST project** - The N-LIST project available in library provides access to e-resources to faculty members, students and research scholars. Total 93809 e-books and 4137 e-journals are available for accessing.
- **Text books, reference books, journals and periodicals** - The faculty use library resources like text books, reference books, journals and periodicals to develop the teaching material.
- The students are issued the books for studying at home and also they have access to reference section. They can study and do the preparation of seminars, group discussions, projects and dissertations using the library resources.
- The faculty sometimes gives library assignments to students for which they refer to certain books, journals or periodicals.
- **Question papers, news papers and magazines** - The question papers of university examinations of previous years are preserved in the library and are used by the students for the preparation of examination. To have the awareness of current affairs, faculty members and students read the news papers and other related magazines.
- **Photocopy facility** - The faculty or students can take the photocopy of any related subject materials from the library.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

Yes, sometimes the college faces challenges in completing the curriculum within the planned time frame and calendar. This does happens despite of teaching plans.

- **Co-curricular and extra-curricular activities** - Because of some unavoidable circumstances and various co-curricular, extra-curricular activities the faculty members may find themselves lagging behind in completing the curriculum.
- **Examination schedule** - Sometimes due to extended university examination schedule the time management is one of the challenges being faced by the faculty.
- **Short span of time** - As the university and the college adopted semester pattern, the assignments, seminars, group discussions, projects, dissertations etc. are needed to be completed in a short span of time.

The way to deal with these challenges and to overcome them is to engage the extra lectures.

- **Extra lectures** - The faculty members are encouraged by the college to engage extra lectures and complete the syllabus within stipulated time. The required laboratory and technical staff is made available for extra practical periods.
- The various departments of the college make special arrangements for holding these extra lectures including Sundays. The course material is provided to the students to speed up the learning process.
- The project and dissertation work is done by the students even in holidays .

### **2.3.11 How does the institute monitor and evaluate the quality of teaching-learning?**

Numbers of measures are taken by the college to monitor and evaluate the quality of teaching and learning.

- **Academic calendar and time-table** -The academic calendar and time-table are prepared well before the start of the session every year.
- **Monitoring of classes, attendance of students and other academic activities** - The classes are regularly engaged by faculty members and monitored by the Principal and Heads of respective departments. The classroom attendance of students is closely monitored. The class test examinations, assignments, seminars, group discussions etc. are conducted at regular intervals.
- **Evaluation** - The performance of students is monitored and evaluated through internal assessment, classroom interactions and the performance in various curricular, co-curricular and extra-curricular activities.
- The evaluation of academic progress is done by taking a review of the



**Permanent teachers** - Total 6 teachers are NET/SET qualified, 4 teachers are having both Ph.D. and M.Phil. degree., 6 teachers are registered for Ph.D. and 1 teacher has submitted the Ph.D. thesis.

**Temporary teachers** - Total 6 temporary teachers are NET/SET qualified.

The details of faculty members and various strategies adopted by the college in planning and management of its human resources are as given below.

- **Recruitment** - Every year vacancy position is placed before the local management committee (LMC) and with the approval of it the recruitment of permanent teachers is done as per the norms of Government of Maharashtra and Sant Gadge Baba Amravati University, Amravati.
- The college appoints the temporary teachers as per the approval of university.
- During the recruitment, college gives the preference to NET/SET and Ph.D. qualified candidates.
- **Retention** - The college has always adopted a policy that has aimed at retaining best of its teachers and makes it a point to maintain an academic atmosphere in the campus.
- **Academic staff development** - The college encourages faculty members to attend the orientation programmes and refresher courses to meet the changing requirements of the curriculum.
- **Curriculum based workshops and seminars** - Whenever there is major change in curriculum, the faculty members are motivated to participate in curriculum based workshops and seminars.
- **Academic pursuits** - The faculty members are encouraged in every way to engage in academic pursuits like attending the conferences, seminars, workshops, writing research papers, articles, books etc.
- **Books** - One book each of the subject zoology and chemistry are published having Dr. A. H. Amaley and Dr. P. P. Deohate as a co-author respectively.
- **Promotion policies and facilities for higher studies** - The college has promotion policies. The faculty members can avail the promotions as per the UGC norms.
- The college provides facilities to the faculty members for higher studies like Ph.D., M.Phil. and encourages for membership of

professional bodies.

**2.4.2 How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programmes / modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

The college is successfully running the programme like biochemistry and also introduced some new programmes.

- **IT and bioinformatics** - In the session 2011-12, two new programmes of modern areas of study are started i.e. IT and bioinformatics.
- **Faculty** - The responsibility as the In-charge of these programmes is shouldered by in-house faculty members Dr. U. K. Bhalekar, Prof. R. G. Chavan and Dr. S. M. Nagrale. Some classes of these subjects are engaged by permanent faculty members of other departments.
- **Contractual and clock hour basis faculty** - The college has appointed contractual and clock hour basis faculty for teaching these subjects. The salaries of these teachers are paid by the college.
- All the faculty members of these programmes are encouraged to participate in conferences, seminars, workshops and other subject related academic programmes.
- **Guest lecturers** - As and when required, guest faculty are also invited to teach the particular topic of syllabus of these subjects.
- **Outcome/results** - The outcome of these efforts is that, both the programmes are running successfully and effectively with excellent results and performance of the students. The results are as follows.

Programme	Semester	Result (%)	
		2013-14	2012-13
2. B.Sc.-III (IT)	V	81.25	100.00
	VI	87.50	92.31
3. B.Sc.-III (Bioinformatics)	V	100.00	77.88
	VI	100.00	100.00

**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

**a) Nomination to staff development programmes.**

The college always encourages the faculty members for attending

academic staff development programmes. The numbers of faculty nominated for attending such programmes during the session 2010-11 to 2014-15 are as given below.

<b>Academic Staff Development Programmes</b>	<b>Number of faculty nominated</b>
Refresher courses	15
HRD programmes	---
Orientation programmes	11
Staff training conducted by the university	03
Staff training conducted by other institutions	---
Summer / winter schools, workshops, etc.	---

**b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning.**

- ❖ **Teaching learning methods/approaches**
- ❖ **Handling new curriculum**
- ❖ **Content/knowledge management**
- ❖ **Selection, development and use of enrichment materials**
- ❖ **Assessment**
- ❖ **Cross cutting issues**
- ❖ **Audio Visual Aids/multimedia**
- ❖ **OER's**
- ❖ **Teaching learning material development, selection and use**

The faculty training programmes organized by college to empower and enable the use of various tools and technology for improved teaching-learning are as follows.

- **Workshops and conferences**
- Workshop on "Value education" was organized by The B. G. E. Society, Akola on 7th Feb. 2015
- Online workshop on "Spoken-tutorial, C and C++" in association with IIT, Bombay was organized on 30<sup>th</sup> Jan. 2015.
- Workshops on "Carrier opportunities for graduates" and "Role of stakeholders in internal quality assurance cell and NAAC" were organized on 28<sup>th</sup> Jan. 2015.
- Seminar on "How to increase your acceptability" was organized on 17<sup>th</sup> Oct. 2014.
- Workshop on "Spectroscopic and stereospecific perspectives of

- chemistry” was organized on 2<sup>nd</sup> Oct. 2014.
- Workshop on “Career management - resume writing and soft skill developments” was organized on 18<sup>th</sup> Feb. 2014.
  - Microbiology student’s summit on “Pure water for better health” was organized on 10<sup>th</sup> Oct. 2013.
  - Workshop on “Education for life and life for nation” was organized on 20<sup>th</sup> Feb. 2013.
  - Workshop on “Moral values, Yes!” was organized on 21<sup>st</sup> to 24<sup>th</sup> Dec. 2012.
  - Workshop on “Life education through Sant Gadge Baba’s dashsutri and Rashtrasant Tukadoji Maharaj’s gramgeeta” was organized on 7<sup>th</sup> Feb. 2012.
  - Workshop on “Career counseling” was organized on 12<sup>th</sup> Jan. 2011.
  - Workshop on “Sericulture, training and guidance” was organized on 16<sup>th</sup> Dec. 2010.
  - Workshop on “Fraternity” was organized on 13<sup>th</sup> Oct. 2010.
  - National conference on “Developing frontiers of physics, astronomy and space sciences” was organized on 24<sup>th</sup> and 25<sup>th</sup> Sept. 2010.
  - **Continuous 14 hours study** - A programme of “14 Tas abhyas vikasacha dhyas” is arranged every year on the occasion of birth anniversary of Bharatratna Dr. Babasaheb Ambedkar. The faculty members of the college participated in this programme by studying 14 hours in a day.
  - **Webinar** - "Webinar on modern techniques in microbiology" was conducted on 5th September 2014 through video conferencing and during this Dr. A. M. Deshmukh, Dr. Babasaheb Ambedkar Marathwada University, Sub-Centre, Usmanabad was interacted with the students.

c) **Percentage of faculty**

- \* **Invited as resource persons in workshops/seminars/conferences organized by external professional agencies.**
- \* **Participated in external workshops/seminars/conferences recognized by national/international professional bodies.**
- \* **Presented papers in workshops/seminars/conferences conducted or recognized by professional agencies.**

<b>Percentage of faculty</b>	<b>2014-15*</b>	<b>2013-14</b>	<b>2012-13</b>	<b>2011-12</b>	<b>2010-11</b>
Invited as resource persons in workshops/seminars/conferences organized by external professional	8.33	5.55	21.05	10.52	0

agencies					
Participated in external workshops/seminars/conferences recognized by national/international professional bodies	83.33	77.77	78.94	78.94	58.82
Presented papers in workshops/seminars/conferences conducted or recognized by professional agencies	45.83	72.22	78.94	78.94	100.00

\* Till January 2015

The strategies adopted by college in enhancing the teacher quality are as given below.

- **Academic staff development** - The college regularly organizes the conferences, workshops, seminars and other academic programmes for the staff and motivates them to attend the orientation programmes, refresher courses, short term training programmes and syllabus based talks regularly. The teachers are encouraged to take part in all academic and other training programmes that are intended to improve the professional skills.
- **Research work** - The college encourages faculty members to participate in research oriented work and to publish that in journals of national and international repute.
- **Internet, ICT technology, e-learning resources** - The internet connections with broadband facilities are made available in all the departments, library and administrative office. The WI-FI network is also established in some specific areas.
- The faculty makes the maximum use of ICT technology, e-learning resources like computers, mobiles, smart phones, OHP, LCD projectors, pen drive etc. to enhance the use of modern resources to uplift the teaching-learning process.
- **In-house training** - The in-house training of faculty members for using internet, ICT method, e-content development, accessing e-books/journals, preparing power point presentations, video-conferencing is done.
- **Change in curriculum** - The new curriculum and other changes are conveyed by the Principal and members of Board of Studies to the faculty members. Some of the faculty members participated in workshops related to the changes in curriculum.



**2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications, teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

In the college, the policies/systems are in place to recharge the teachers as follows.

- **Interaction with eminent personalities** - The college regularly organizes the conferences, workshops and seminars for the students and staff. The college organizes the guest lectures of eminent personalities in various fields. The interaction of faculty members with these personalities during these events helps them to refresh and recharge their knowledge, which is very helpful for the academic progress of college.
- **Academic staff development** - The faculty members are motivated to attend the orientation programmes, refresher courses, short term training programmes and syllabus based talks regularly. They are also motivated to participate in conferences, seminars, workshops organized by various institutes, universities and by the private sectors.
- **Research facilities** - The college encourages the faculty members to pursue the Ph.D. degree, participate in research oriented work and to publish the research work in journals of national and international repute.
- To boost up the research skills among the teachers, the college and management make available the required facilities to send the proposals of minor and major research projects. Teachers have complete freedom to spend the research grant as per the directives of funding agencies.
- **Financial support** - The financial assistance for purchasing the required research equipments, instruments, chemicals is provided to all departments on priority basis. The management also gives the financial support to the faculty pursuing Ph.D. degree.
- **Resource person/examiner/judge** - The college promotes the faculty members as resource person and to work as examiner/judge in various

competitions such as science exhibition, seminars, debates etc. organized by other institutions.

- **Duty leave and travel grant** - The college sanctions the duty leave to the faculty members for participating in all such events and provides travel grant for attending conferences, seminars, workshops and registration fees. The details are as in Section-2.3.2.

**2.4.5 Give the number of faculty who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

The following faculty members have received awards/recognition for excellence in teaching during the session 2010-11 to 2014-15.

**Session: 2014-15**

1. **Dr. S. M. Padhye**, Associate Professor & Head, Department of Mathematics, has chaired the technical session in "National conference on recent trends in mathematics, physics and their applications" at Shankarlal Khandelwal College, Akola.
2. **Dr. A. H. Amaley**, Assistant Professor in Zoology, has given laboratory demonstration as invited speaker and also awarded for the best oral research paper presentation in "National symposium cum workshop on diversity of spiders with special reference to taxonomy and molecular systematics" at Shankarlal Khandelwal College, Akola.

**Session: 2013-14**

1. **Dr. P. T. Agrawal**, Assistant Professor in Chemistry, has been recognized as the supervisor for Ph.D. by Gondwana University, Gadchiroli.

**Session: 2012-13**

1. **Dr. V. D. Nanoty**, Principal, has chaired the technical session in "National conference on innovative research trends in biological sciences" at Shri Shivaji Arts, Commerce and Science College, Akola and "National conference on recent trends in biological sciences" at G.S. College, Khamgaon.
2. **Dr. S. M. Padhye**, Associate Professor & Head, Department of Mathematics, has chaired the technical session in "National conference on mathematical sciences" at Shri Dr. R.G. Rathod Arts and Science College, Murtizapur. He has worked as a resource

person for "Orientation course on content enrichment and pedagogy for TGT mathematics" at Jawahar Navodaya Vidyalaya, Akola.

3. **Dr. S. W. Bhaware**, Assistant Professor in Mathematics, has delivered talk as invited speaker in "National mathematical symposium" at Shantaram Janorkar Mathematical Foundation, Mahan, District-Akola. He has worked as a resource person for "Orientation course on content enrichment and pedagogy for TGT mathematics" at Jawahar Navodaya Vidyalaya, Akola.
4. **Dr. P. P. Deohate**, Assistant Professor & Head, Department of Chemistry, has been recognized as the supervisor for Ph.D. by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
5. **Ms. S. B. Tadam**, Assistant Professor in Mathematics, has worked as a resource person for "Orientation course on content enrichment and pedagogy for TGT mathematics" at Jawahar Navodaya Vidyalaya, Akola.

#### **Session: 2011-12**

1. **Dr. V. D. Nanoty**, Principal, has been felicitated at the hands of Dr. Sudhir Meshram, Vice Chancellor, North Maharashtra University, Jalgaon for excellent work in the subject microbiology at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad. He has chaired the technical session in "National conference on advances in life sciences for sustainable rural development" at Shankarlal Khandelwal College, Akola.
2. **Dr. S. M. Padhye**, Associate Professor & Head, Department of Mathematics, has delivered talk as invited speaker in "77<sup>th</sup> Annual conference of the Indian mathematical society" at S.R.T. Marathwada University, Nanded. He has worked as a resource person for "Short term training programme on use of mathematical softwares and fundamentals for engineering multidisciplinary applications" at H.V.P. Mandals's College of Engineering and Technology, Amravati.
3. **Dr. A. H. Amaley**, Assistant Professor in Zoology, has been awarded for the best oral research paper presentation in "National conference on arachnology" at Walchand College, Solapur.
4. **Dr. P. P. Deohate**, Assistant Professor & Head, Department of Chemistry, has been recognized as the supervisor for Ph.D. by Sant Gadge Baba Amravati University, Amravati.

#### **Session: 2010-11**

1. **Dr. S. W. Bhaware**, Assistant Professor in Mathematics, has received the "Vidya bhushan award" from Indian NET-SET association.

2. **Mr. R. D. Chandrawanshi**, Director of Physical Education, has been appointed as the coach of women wrestling team of Sant Gadge Baba Amravati University, Amravati for all India inter-university tournament at Jaipur.

The college culture and environment contributed to the awards/recognition received by the faculty members by his/her felicitation at the hands of guest of eminence every year on 26<sup>th</sup> January and by due publicity through the news papers, display boards, college magazine and website.

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

Yes, the college has the practice of evaluation of teachers by the students.

- **Feedback from students** - The college carries out the evaluation of teachers on the basis of the feedback obtained from the students at the end of session through elaborately prepared questionnaire based on 5 point scale i.e. excellent, very good, good, average and below average.
- **Analysis by teachers' evaluation committee** - The teachers' evaluation committee carefully analyzes the feedback and the results of analysis are communicated to the teachers through the Principal.
- **Advice and suggestions** - If the feedback is not satisfactory, the Principal holds discussion with the concerned teachers and advice is given to overcome the weaknesses for improving the teaching. The teachers get constructive suggestions about their teaching style, participative teaching-learning, use of innovative methods for teaching etc. through the feedback, which help them to improve the quality of teaching.

The evaluation of teachers by the external peers is also worked out in the college.

- **Evaluation by academic peers** - The college collects the information from teachers about their academic activities and performance in prescribed proforma at the end of session. It is then put forth before the external academic peers appointed by the college.
- **Evaluation by screening/selection committee** - At the time of promotion of teachers to higher grade and scale the evaluation of teachers by the external Peers is done. As per the UGC and university norms, the college collects self appraisal report of teachers every year as a part of performance based appraisal system (PBAS), which are evaluated by the screening/selection committee and used for the

promotion of teachers.

- **Evaluation by management members, guest faculty and subject experts** - The executive members of the management, guest faculty and the experts in various subjects while visiting the college interact with various stakeholders of the college, gather the information about academic performance of teachers and convey their opinions and remarks to the Principal, which are then forwarded to the teachers. This leads to an informal evaluation teachers by the external peers.

## **2.5 Evaluation Process and Reforms**

### **2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

The college ensures the awareness of stakeholders of the college about the evaluation process in following manner.

- **Staff council and departmental meetings** - The evaluation process laid down by the university and the college is discussed in the Principal's meeting with Heads of the departments and is circulated through notices amongst the faculty members.
- The faculty members are also made aware about the process of evaluation through staff council and departmental meetings.
- **Principal's address and classroom briefing** - The students are informed about the evaluation process during the Principal's address at the beginning of the academic session. The classroom briefing is also done by teachers time to time.
- **Notices** - The schedule of the class test examinations, seminars, group discussions, assignment submission etc. and their evaluation details are communicated to the students through notice boards.

### **2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

The major evaluation reforms of the university that the college has adopted are as given below.

- **Semester pattern and choice based credit system (CBCS)** - The college has adopted the semester pattern at both UG and PG level. The choice based credit system (CBCS) is also adopted by the college at PG level.
- **Internal assessment** - The internal assessment of the students is to be

carried out by the college on the basis of his/her performance in class test examinations, seminars, group discussions, assignments, projects, dissertations etc.

- **Objective type question** - The questions like fill in the blanks, select the correct alternatives, answer in one sentence are incorporated in the question papers at UG level.
- **75% Attendance** - To appear for university examinations, the minimum 75% attendance of each student in classes is the compulsory requirement as per the university norms and it is strictly followed by the college.

The evaluation reforms initiated by the college on its own are as mentioned below.

- **Copy free environment** - The college conducts the class test examinations in copy free environment and the whole process of examination is monitored by the chairman of examination committee and the Principal.
- **Paper setting** - Even for the class test examinations of the college the paper setting is done strictly in accordance with the university norms.
- **Cross checking of marks** - The evaluation of the answer sheets of class test examinations is done with cross checking by students and marks are finalized in presence of the students.
- **Record of marks** - All the departments and the examination committee keep the record of marks of each and every examination.
- **Objective type test examinations** - The objective type test examinations with multiple choice questions are also conducted in some subjects.

### **2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

The examination committee along with Heads of various departments takes care of the effective implementation of the evaluation reforms of the university as well as the college.

- **Regular meetings of examination committee** - The college ensures that the members of the examination committee meet regularly and discuss the examination matters in all seriousness.
- **Copy free environment** - The college is the centre of examinations of Sant Gadge Baba Amravati University, Amravati and is conducting the examinations in copy free environment since long time.
- **Involvement of faculty members in external evaluation** - The maximum

faculty members are involved in the external evaluation like the supervision of examinations, valuation of answer scripts, external examiner for practicals and viva and so on.

- **Transparency in examination procedure** - The examination committee prepares the schedule of class test examinations. All possible attempts are made to prevent any unfair means. College strictly adhere to university norms regarding the evaluation. Evaluation of answer scripts is strict, impartial, impersonal and vigilant. After the evaluation of answer scripts marks are displayed on the notice board for the observation by students and their parents.
- **Internal assessment marks** - The internal assessment marks of the students are displayed by all departments before 1 month of the commencement of university examination.
- **Immediate resolution of grievances** - The grievances regarding evaluation, if filed, are immediately resolved by the concerning teachers and the Head of department. The Principal and IQAC also review the implementation of the evaluation process and accordingly suggestions are given to the examination committee.
- **Evaluation and photocopy of answer scripts** - In university examinations the students are allowed to apply for revaluation and accordingly get the photocopy of his/her answer scripts. The faculty members help the students in evaluation of photocopy of answer scripts.

#### **2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

The college has adopted both formative and summative assessment approaches to measure the students' achievement.

**Formative assessment** - In view of formative assessment, the college has its own internal evaluation process.

- **Classroom interaction, home assignments, problem solving sessions, tests** - On completion of each unit, the measures like classroom interaction with students through question-answer, unit test, home assignments, problem solving sessions etc. are adopted by the teachers.
- **Co-curricular activities** - The student activities like seminars, group discussion, educational study tours, industrial visits, guest lectures etc. are arranged in each semester by all departments.

- **MCQ tests** - The aptitude test and concept test in various subjects are conducted with multiple choice question patterns.
- **Extra classes** - During the formative assessment, teachers come to know the slow and fast learners among the students. The extra classes are arranged for such students by each department.
- **Remedial, entry in services and NET/SET coaching** - The remedial coaching, coaching for entry in services and NET/SET coaching are also provided to the students throughout the session.
- **Regular checking of practical records/journals** - The college has the practice of regular checking of practical records/journals. It involves the continuous assessment of the students during learning process.
- **Continuous supervision of research work** - of the students are regularly and continuously supervised by the respective faculty.

The summative assessment takes place at the end of each semester and session.

- **Internal assessment, 75% attendance, regular classes** - The continuous internal assessment and evaluation, 75% attendance, sincerity and punctuality of teachers in engaging the theory and practical classes ensure the regularity of students in classroom and laboratories.
- **Display of internal marks 1 month before the university examination** - The internal assessment marks based on the subject/project assignments, participation in activities like seminars, group discussions, educational study tours, industrial visits and marks obtained in class test examination are allotted to the students and displayed on notice board by each department before one month of the commencement of university examination.
- **Credits to attendance, co-curricular and extra-curricular activities** - The credits are also awarded to co-curricular, extra-curricular, games and sports activities. The due credit is given for regular attendance. The credits are also awarded to co-curricular, extra-curricular, games and sports activities.
- **Class test and test practical examinations** - The common class test examination and the test practical examination are conducted at the end of each semester prior to the university examination.
- **University examinations** - The university conducts a summative assessment at the end of each semester through theory and practical examinations, viva-voce, project and dissertation work evaluation. This is strictly according to the university stipulation.



The impact of the formative and summative assessment approaches of the college during the session 2010-11 to 2014-15 is as follows.

**Session: 2014-15**

1. **Ms. Priti Sharma** (Ph.D. Scholar, Microbiology) and **Mr. Sandip Toshniwal** (M.Sc.-I, Microbiology) have been awarded with colour coat and they represented the Sant Gadge Baba Amravati University, Amravati in state level research festival "Avishkar" at Maharashtra Animal and Fisheries University, Nagpur. They have been selected for the national level research festival "Anvention"
2. **Ms. Roshani Mulani** (M.Sc.-II, Chemistry), **Ms. Manju Pariyani** (M.Sc.-I, Chemistry) and **Ms. Soniya Nagre** (B.Sc.-III) have been awarded with colour coat and they represented the Sant Gadge Baba Amravati University, Amravati in state level research festival "Avishkar" at Maharashtra Animal and Fisheries University, Nagpur.

**Session: 2013-14**

1. **Ms. Ankita Kabra** (B.Sc.-III) has secured 4<sup>th</sup> position in the merit list of B.Sc., Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
2. **Ms. Bhuvaneshwari Wankhade** (B.Sc.-III) has secured 9<sup>th</sup> position in the merit list of B.Sc., Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Pooja Balode** (M.Sc.-II, Microbiology) has secured 2<sup>nd</sup> position in the merit list of M.Sc.-Microbiology, Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
4. **Ms. Deeptishree Yadav** (M.Sc.-II, Microbiology) has secured 3<sup>rd</sup> position in the merit list of M.Sc.-Microbiology, Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
5. **Ms. Rasika Udupure** and **Ms. Ankita Sharma** (B.Sc.-III) have been awarded with colour coat and they represented the Sant Gadge Baba Amravati University, Amravati in state level research festival "Avishkar" at North Maharashtra University, Jalgaon.
6. **Mr. Akshay Shriwas** (B.Sc.-II) has been awarded with colour coat and he represented the Sant Gadge Baba Amravati University, Amravati in state level research festival "Avishkar" at North Maharashtra University, Jalgaon.
7. **Mr. Anshu Jagmohan** (B.Sc.-III) has passed the SSB examination and

joined the training as a commission officer in Indian Army at Chennai.

#### **Session: 2012-13**

1. **Ms. Roshani S. Mulani** (B.Sc.-III) has achieved one gold and three silver medals in B.Sc., Summer-2013 examination of the Sant Gadge Baba Amravati University, Amravati. She achieved gold medal for 1<sup>st</sup> merit in chemistry, one silver medal for 2<sup>nd</sup> merit amongst all students and two silver medals for 1<sup>st</sup> merit amongst girl students.
2. **Mr. Tushar S. Ghope** (B.Sc.-III) has secured 4<sup>th</sup> position in the merit list of B.Sc., Summer-2013 examination of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Vandana S. Deshmukh** (M.Sc.-II, Chemistry) has secured 8<sup>th</sup> position in the merit list of M.Sc.-Chemistry, Summer-2013 examination of the Sant Gadge Baba Amravati University, Amravati.
4. **Mr. Abhineet D. Sharma** (B.Sc.-III) has passed the CDS examination and he selected as a commission officer in Indian Army.

#### **Session: 2010-11**

1. **Ms. Shubhada Kulkarni** (B.Sc.-III) has achieved gold medal for 1<sup>st</sup> merit amongst all students in B.Sc., Summer-2011 examination of the Sant Gadge Baba Amravati University, Amravati.
2. **Ms. Sulbha Kulkarni** (B.Sc.-III) has achieved silver medal for 2<sup>nd</sup> merit amongst all students in B.Sc., Summer-2011 examination of the Sant Gadge Baba Amravati University, Amravati.

#### **2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.).**

The examination committee and Head of the departments look after the entire process of internal assessment and as per their prescription each department follows the process with rigor and transparency.

- **Academic/internal assessment** - The students are assessed throughout the semester/session by conducting seminars, group discussions, classroom interactions, home assignments, projects, dissertations, aptitude tests of MCQ pattern, class test examination etc.

- The internal assessment of the students is also made by faculty members on the basis of class attendance, behavioral aspects, independent learning, communication skill etc. and "Best student award" is given to such student. The internal assessment marks are displayed on the notice boards of each department.
- **Evaluation of answer scripts with cross checking of marks** - In class test examinations evaluation of answer scripts is done with cross checking by students and the marks are finalized in presence of students.
- **Weightages in terms of marks** - As per the directions of Sant Gadge Baba Amravati University, Amravati weightages in terms of marks are assigned to the students.

#### **2.5.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?**

The college dedicates itself to the cause of science education and propagation of scientific temper among the students. The college is committed to provide knowledge, skill and seeks to mould students into multifaceted persons capable of facing the challenges in rapidly changing world.

The graduate attributes specified by the college are as follows.

- **To inculcate the effective learning abilities and research skills.**
- **To extend the intellectual depth and to increase the acceptability.**
- **To imbibe the ethical and social responsibilities.**
- **To develop the teamwork and leadership qualities.**
- **To make creative, innovative and self-reliant.**

The college ensures the attainment of these graduate attributes by the students in following manner.

- **Effective learning and research skills** - The college provides opportunities to the students to inculcate the effective learning abilities and research skills through participation in seminars, group discussions, workshops, scientific projects, research festivals etc.
- **Intellectual depth** - The college motivates the students to participate in curricular, co-curricular and extra-curricular activities that deepen the knowledge of students. To extend the intellectual depth through practicals, college provides all necessary facilities and well furnished laboratories with highly advanced equipments and sophisticated instruments.

- **Ethical and social responsibilities** - The college makes the students aware of social justice issue relevant to their discipline and profession. Various programmes are organized by NSS, NCC and sports units of college to make aware the students about their ethical and social responsibilities.
- **Teamwork and leadership qualities** - The college has regular practice of involvement of students in various college administrative activities and committees to develop the teamwork and leadership qualities. The members of student representative council are always given the chance to work with faculty on various platforms. They are encouraged to take initiatives and lead others.
- The successful organizations of NSS camp, blood donation, blood group checking activities, college level seminars, workshops, games and sports activities since long time are the few examples of teamwork and leadership qualities in students.
- Every year, students of the college are actively participating in debate and elocution competition and bringing so many awards/prizes. Self governance programme is also conducted in the college every year on 5<sup>th</sup> September.
- **Creative, innovative and self-reliant** - The college organizes science project competition and exhibition "Science-Pundit" for the students to make them creative, innovative and self-reliance.
- The students are encouraged to participate in research festivals like "Avishkar" and other research oriented projects.
- The annual college magazine "Pratibimb" and wall magazines of various departments provide the platform for students to explore their ideas and creativity in the field of science and technology, literature, social activities etc.
- The college has "Sky Observation Club". It is an initiative by the college to develop interest in the field of astronomical sciences and to make the students creative and innovative.

#### **2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

The college and the university, both have their own mechanism for redressal of grievances with reference to evaluation.

##### **At college level -**

- The internal assessment marks are allotted to the students on the basis of their performance in class test examinations, seminars, group

discussions, assignments, projects, dissertations, participation in study tours and industrial visits etc.

- The grievances regarding internal assessment marks are immediately taken into consideration and are resolved by the concerned teacher and Head of the department.
- In case of grievances about the marks in unit tests / class test examinations and other objective type of tests conducted in various departments the marks are finalized in presence of students.

#### **At university level -**

- The mechanism for redressal of grievances is according to the direction of Sant Gadge Baba Amravati University, Amravati for reassessment of answer books of examinees, No.12/2010, dated 6.5.2010.
- As per the direction the examinees may seek for reassessment of their answer book/s without obtaining the photo copy/ies of answer book/s in maximum two subjects/papers. Such examinees have to apply for the same in the prescribed format of the university.
- The answer book/s is/are assessed by the subsequent examiner/s.
- The change in marks after reassessment, if any, is communicated to the applicant/s and revised statement of marks is given to them.
- The process of reassessment is to be completed as far as possible within a period of 40 days from the due date of the receipt of application.
- After the change in the result of examinees, they may be permitted, if eligible for seeking admission to next higher class or avail the facility of the provision of A.T.K.T.

## **2.6 Student performance and Learning Outcomes**

### **2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?**

Yes, the college has clearly stated learning outcomes. Students and staff are made aware of these through -

- **Vision, mission, goals** - The learning outcomes are pre-stated in vision, mission and goals of the college and are also reflected in college logo.
- **Prospectus, magazine, teachers diary, website, prominent places** - The vision, mission and goals of the college are printed in the prospectus, magazine, teachers diary and displayed on the website of college, in each department, library, administrative office and prominent places through display boards.

- **Principal's address, NSS, NCC, sports and other activities** - Students of the college are made aware of these learning outcomes through Principal's address at the beginning of session, classroom interactions during initial classes, NSS, NCC, sports activities and through teacher guardian scheme.
- **LMC, staff council and departmental meetings** - The teaching and non-teaching staff is made aware of clearly stated learning outcomes during LMC, staff council and departmental meetings.
- **Alumni, parent teacher association and other programmes** - Other stakeholders of the college are informed about the learning outcomes through the meetings of alumni association, parent teacher association and other functions and programmes of the college.

**2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

The achievement and examination committee along with Head of the departments monitors and communicates the progress and performance of students.

- **Staff council meeting** - In the staff council meeting subject wise result analysis of every semester is presented by the Principal and discussed with the faculty members of concerning department for improvement.
- The performance of students in class test examinations and internal assessments are displayed on the notice boards of each department.
- **Prospectus, magazine, Website, display boards, notice boards** - Achievements of the students are published in the college prospectus, magazine and displayed on the website, display boards, notice boards of respective departments. Every year on republic day i.e. 26<sup>th</sup> January, these students are felicitated at hands of eminence.
- **Foundation day function of society** - The meritorious performance of students in university examinations and the achievements in various fields are communicated to members of management and all the stakeholders of the B.G.E. Society, Akola in foundation day function of society.
- **Alumni, parent teacher association, teacher guardian scheme** - The performance and achievement of the students are communicated through the meetings of alumni association, parent teacher association

and also through teacher guardian scheme.

The teacher guardian and concerning faculty interact with the students and find out the reasons for his/her performance. Counseling is done and proper guidance is given to the students to improve the performance in university examination.

The analysis of students result during the session 2010-11 to 2013-14 is as below.

Programme	Semester	Result (%)			
		2013-14	2012-13	2011-12	2010-11
1. B.Sc.	V	69.31	67.59	40.63*	69.77*
	VI	85.79	79.82		
2. M.Sc. (Mathematics)	III	21.15	34.48	18.18	26.92
	IV	15.38	17.85	25.00	54.55
3. M.Sc. (Chemistry)	III	61.53	62.50	38.46	---#
	IV	84.62	81.25	07.69	---#
4. M.Sc. (Microbiology)	III	94.74	75.00	---†	---†
	IV	100.00	100.00	---†	---†

\* Annual Pattern

# No students for semester III and IV, as the programme is started in the session 2010-11.

† No students for semester III and IV, as the programme is started in the session 2011-12.

Subject	Semester	Result (%)			
		2013-14	2012-13	2011-12*	2010-11*
1. Biochemistry	V	87.88	82.61	52.04	95.45
	VI	84.85	91.30		
2. Bioinformatics	V	100.00	77.78	---#	---#
	VI	100.00	100.00		
3. Botany	V	91.07	100.00	59.38	89.47
	VI	94.74	95.00		
4. Chemistry	V	83.61	69.35	43.02	63.64
	VI	91.13	84.13		
5. Computer Science	V	78.57	89.66	42.86	88.89
	VI	85.71	82.76		
6. Electronics	V	85.00	80.00	50.00	83.33
	VI	100.00	90.00		
7. Information Technology	V	81.25	100.00	---#	---#

8. Microbiology	VI	87.50	92.31	65.12	95.45
	V	87.27	80.49		
	VI	83.64	90.24		
9. Mathematics	V	63.04	84.85	57.58	82.35
	VI	89.36	96.97		
10. Physics	V	62.82	85.71	45.28	84.38
	VI	89.87	83.67		
11. Zoology	V	85.48	80.77	71.79	95.24
	VI	98.41	81.48		
12. English	I	80.82	70.36	70.04	75.63
	II	90.14	87.02	87.22	68.49
13. Marathi	I	95.82	90.11	91.82	86.22
	II	94.39	94.38	93.87	80.10
14. Hindi	I	98.15	87.50	92.31	97.29
	II	88.00	91.67	95.92	97.29

\* Annual Pattern

# No students for semester V and VI, as the programme is started in the session 2010-11.

### 2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The teaching, learning and assessment strategies of the college are structured in order to facilitate the achievement of the intended learning outcomes to be seen in students i.e. knowledge and understanding, learning, practical and research skills, intellectual depth and acceptability, communication skills, social responsiveness, scientific temper etc.

- **Strategies are structured by LMC, staff council and IQAC** - The LMC, staff council and IQAC of the college structured teaching, learning and assessment strategies so as to cater the needs of slow, fast as well as the average learner students.
- **SWOC analysis and planning** - The Principal and Head of the departments conduct regular meetings with the faculty and on the basis of SWOC analysis each department prepares its own plan to facilitate the intended learning outcomes through overall development of students.
- **Preparation of teaching plan, course file, question bank, laboratory manuals** - The faculty prepares their individual teaching plan, course file, question bank and other study material as per the intended



learning outcomes. The laboratory manuals, practical booklets are also prepared to understand the procedural aspects of the experiments to be performed.

- The practical sessions are planned to supplement the theory and their regular assessment is carried out.
- **Use of ICT facilities** - The faculty members are encouraged to use ICT facilities in the teaching process and are motivated to undergo faculty development programme in order to understand the learning outcomes and expectations from the course properly.
- **Evaluation of students through test examinations, assignments and projects** - The continuous evaluation of students' performance through class test examination, assignments and projects are carried out.
- **Mentoring, remedial, NET/SET and MPSC/UPSC entry-in services classes** - The college conducts mentoring classes for slow learners. The remedial coaching is also given to the students along with the NET/SET and MPSC/UPSC entry-in services classes. The fast learners are encouraged and guided for participation in various seminars, workshops and research oriented projects.
- **Guest lectures and interactions** - The guest lectures of eminent personalities and their interaction with students on various aspects of the curriculum are also organized.
- **Felicitation of students** - The students with remarkable achievements are felicitated on 26<sup>th</sup> January and cash prizes/medals are given to the meritorious students in the memory of Late Principal M.G. Joshi on 24<sup>th</sup> December every year.

#### **2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?**

The college takes up the following measures and initiatives to enhance the social and economic relevance of the courses offered.

**Campus and off-campus placement through career guidance cell** - The career guidance cell of college helps the students for facing the interviews and gives handy tips. The campus and off-campus placement interviews are arranged. The faculty members guide the students as per the need of job. The students placed during the session 2010-11 to 2013-14 are as follows.

**Session: 2014-15**

1. **Ms. Krutika Deshpande, Ms. Bhavana Tripathi and Ms. Ritika Bhalerao** have been selected in BPO services of Infosys, Pune.

**Session: 2013-14**

1. **Mr. Abhineet Sharma** has joined as Lieutenant in Gorkha regiment of Indian Army.
2. **Mr. Anshu Jagmohan** has passed the SSB examination and joined the training as a commission officer in Indian Army at Chennai.
3. **Ms. Devika Sharma, Ms. Archana Kharat, Mr. Ankush Wani and Mr. Akshay Wani** have been selected as software developer in Cognizant Software Limited, Pune.

**Session: 2012-13**

1. **Ms. Sulabha Kulkarni** has joined as a customer care assistant in State Bank of India, Patur.
2. **Mr. Abhineet D. Sharma** has passed the C.D.S. examination and he selected as a commission officer in Indian Army.

**Session: 2011-12**

1. **Mr. Swapnil Ingle** has been selected as software executive in Infosys, Pune.
2. **Mr. Satish Ludarkar** has been selected as officer in B.S.F. of India.
3. **Ms. Sulabha Kulkarni and Ms. Priyanka Thorat** have been selected as software executive in Cognizant Software Pvt. Ltd., Pune.
4. **Ms. Ruchi Mulatkar** has joined as a senior SAP career consultant in Atos India Pvt. Ltd., Pune.
5. **Mr. Ashish Gosavi** has been selected in Hyderabad Bank, Akola.

**Session: 2010-11**

1. **Ms. Shubhada Kulkarni** has joined as a trainee officer in State Bank of India, Shegaon.
  2. **Mr. Abhineet Sharma** has been selected as executive operator in IBM, Pune.
- **Entrepreneurship, interactive talks by educational and industrial executives** - The field surveys, educational study tours and industrial visits of the students are arranged by various departments. During this interactive talks are delivered by educational and industrial executives to instill entrepreneurship among the students.
  - **Research projects** - The college faculty instills research aptitude in

students by giving them minor projects. The P.G. students have to complete the study project and dissertation in partial fulfillment of their course. The students are encouraged to present the research paper in conferences, seminars and research festivals.

- **Career oriented programmes** - The career oriented programmes like C.C.L.T., D.C.L.T. and A.D.C.L.T. are started by the college and they are running successfully.
- **MPSC/UPSC entry-in services and NET/SET classes, consultancy services** - The college runs the MPSC/UPSC entry-in services and NET/SET coaching classes. The consultancy services are also provided by some departments.

#### **2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?**

The college collects and analyzes data on student performance and learning outcomes and uses it for planning and overcoming barriers of learning in following manner.

- **Unit test and class test examinations** - The college conducts the unit test and class test examinations prior to the annual and semester end examinations of Sant Gadge Baba Amravati University, Amravati and on the basis of the performance in these examinations the students who are weak in their studies and performing below the average are identified.
- **Results of university examinations** - The college also analyses the results of examinations conducted by Sant Gadge Baba Amravati University, Amravati in staff council, departmental meetings. The teachers of respective sections and the teacher guardians keep the data of all students about their academic and overall performance.
- **Teacher guardian scheme** - The Principal of the college conducts regular meetings with teacher guardians to obtain the data about academically and economically weak students.
- The teacher guardians interact regularly with students assigned to them and find out the academic performance of students and probable reasons for the same.
- **Slow and fast learners** - The teachers identify the slow and fast learners and counsel to parents of slow learners regarding improvement in the performance of their wards. Teachers guide slow learners with the help of remedial coaching, suitable projects, seminars

and paper presentation etc.

#### **2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?**

The college monitors and ensures the achievement of learning outcomes in following ways.

- **Class test examination** - The college conducts class test examination, test practical examination and then students appear for the university examination.
- **MCQ tests** - The objective type multiple choice question pattern examinations are conducted by the college. Home assignments are also given to the students.
- **Monitoring of library book issue register** - To know the students interest in academic activities monitoring of the library book issue register is done.
- **Co-curricular activities** - The participation and achievement of students in co-curricular activities is also monitored.
- **Makeup/resource lectures** - The faculty members identified the slow, fast learners and fulfill their specific needs. The makeup/resource lectures to meet the students requirements are also organized by the departments.
- **Planning and effective implementation** - To ensure the achievements of learning outcomes, college focuses on planning and effective implementation of teaching and learning. The research culture and value based education is also inculcated.

#### **2.6.7 Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

Yes, the college and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning.

- **Internal assessment marks** - The internal assessment marks are allotted to the students on the basis of their performance in class test examinations, seminars, group discussions, assignments, projects, dissertations, participation in study tours and industrial visits etc.
- **Assessment on the basis of co-curricular and extra-curricular activities** - The assessment of students' performance is also done on

the basis of co-curricular and extra-curricular activities. The weightage to different aspects of learning such as regularity, class attendance, individual thinking, verbal questioning, behavioral aspects, independent learning, communication skill, surprise test, objective test, cultural events, games and sports etc. is given. Monthly attendance record leads to the regularity of students in classes.

- **Corrective measures and planning of strategies** - The assessment outcomes are indicators of student performance and if number of underperforming students is large the huge corrective measures are applied after discussion in meetings and planning some strategies. For example if repeatedly the particular subject results are not satisfactory, then additional classes, tutorials are recommended to concerning faculty.
- **Examples**
- **National scholarship "INSPIRE"** - The college students with high academic performance; Ms. Ankita Kabra, Ms. Manju Pariyani, Ms. Farheen Maniyar, Mr. Avinash Khanderao and Mr. Dnyaneshwar Thombare are recommended to apply for national scholarship like 'INSPIRE' and now these students are getting the scholarship of Rs. 4,00,000/- for the period of 5 years.
- **Research fellowship** - Ms. Kalpana Palaspagar and Ms. Priti Sharma are registered for the Ph.D. and are getting the fellowship Rs. 16,000/- and 14,000/- per month respectively.
- **Research festival "Avishkar" and "Anvention"** - The students performing well in their academics are encouraged to participate in research festival "Avishkar" and they received the awards at university and state level. Two students are selected for national level research festival "Anvention"
- **Colour coats in sport activities** - On the basis of assessment, the students recommended for participation in games and sports achieved the colour coats of university and they represented the college at national level.

**Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include?**

- The college has always placed the students as the focal point of its efforts and has regarded them as the main stakeholders in its policies. The college provides special attention to the students with disadvantaged background and implements the admission procedure with full regard

to the Government of Maharashtra and Sant Gadge Baba Amravati University, Amravati rules and regulations.

- The college has highly equipped, sophisticated, well furnished laboratories, research facilities, enriched library, virtual classrooms, well established auditorium, games and sports facilities with physical fitness centre, WI-FI network etc. which ensures the effective implementation of teaching and learning.
- So far as the teaching is concerned, the college has been continuously making efforts to enhance their status as teachers and academicians. The college has developed its merit culture in the district.
- The college assigns highest importance to learning outcome since it is the culmination of three year efforts on the part of the students and the college. The final product is what the college gets its name for, and with thousands of ex-RLT'ions spread throughout the country doing extremely well as professionals and academicians, it is in a position to ensure that its graduates will have all the attributes that the university wants to wear on graduation.

### CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

#### 3.1 Promotion of Research

Every teacher is a good researcher. Keeping this in Mind College has taken innovative measures to boost the research aptitude among the teachers and students. In order to achieve this goal the activities of research publications, extension and consultancy were re-orientated with clearly defined vision and mission under the guidance of our visionary Principal Dr. V. D. Nanoty.

##### 3.1.1 Does the institution have recognized research centre/s of the affiliating University or any other agency/organization?

Yes, the college has 3 recognised research centres i.e. Chemistry, Microbiology and Mathematics. The research laboratories of Chemistry and Microbiology are recognised by S.G.B Amravati University (Jan-2003) with each having the capacity of 5 research students to work for Ph.D.

##### Details of Research Guides and area of research:

Sr. No	Departments	Research Guide	Area of Research
1.	Microbiology	Dr. V.D. Nanoty	<ul style="list-style-type: none"><li>• Microbiology</li><li>• Nanotechnology</li><li>• Functional Analysis</li><li>• Perturbation theory of linear operation,</li></ul>
2.	Mathematics	Dr. S.M. Padhye  Dr. P.P. Deohate	<ul style="list-style-type: none"><li>• Spectral theory</li><li>• Real analysis</li><li>• Topology</li><li>• Organic heterocyclic synthesis</li><li>• Microwave assisted green synthesis</li></ul>
3.	Chemistry	Dr. P.T. Agrawal	<ul style="list-style-type: none"><li>• Non-aqueous potentiometric determination</li><li>• Physico-chemical studies of ground water and irrigation water</li></ul>

**3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

Yes, the college has research committee to monitor and address the issues of research.

Its composition is as follows:

Sr. No	Designation	Name	Position	Qualification
1	Principal	Dr. V.D. Nanoty	Co-ordinator	M.Sc., Ph.D.
2	IQAC Coordinator	Dr.P.T. Agrawal	Member	M.Sc., M.Phil., Ph.D.
3	HOD (Mathematics)	Dr. S.M. Padhye	Member	M.Sc. ,Ph.D.
4	HOD (Chemistry)	Dr. P.P. Deohate	Member	M.Sc. ,Ph.D.
5	HOD (Zoology)	Dr. S.M. Nagrale	Chairman/ Incharge	M.Sc., NET, Ph.D.

Under the leadership of Principal Dr. V. D. Nanoty, Research committee has suggested recommendations from time to time and the impact of which has been felt in creating research culture amongst the faculties and students.

Few recommendations and their impacts are as follows.

Recommendations	Impacts
Consider research as an indispensable function of college activity	<ul style="list-style-type: none"> <li>• Every faculty is actively involved in research and research related work.</li> <li>• Faculties enhancing their qualification with PhD, NET/SET, pursue PhD, major and minor research project.</li> </ul>
Encourage faculty to apply for various research projects and grants	<ul style="list-style-type: none"> <li>• UGC sanctioned 10 minor and 1 major project during period 2010-11 to 2014-15</li> </ul> <p>Major Research Project <b>ongoing : 1</b></p>



Minor Research Projects **complete** : 4

Minor Research Projects **ongoing** : 6

Minor Research Project **proposed** : 2

- During 2010-11 to 2014-15, faculties and students achieved the following

- One faculty of Zoology is 1<sup>st</sup> prize two times for best paper presentation in national conference and workshop.

- Faculties are working as resource persons in research related programmes.

- One research student is awarded 1<sup>st</sup> and 2<sup>nd</sup> prize in national conferences.

- Two UG students are awarded 1<sup>st</sup> prize, one student is awarded 2<sup>nd</sup> prize in national conferences and 15 students are awarded prizes in university level/ intercollegiate seminar competition.

- Every year students actively participate in Research festival **Avishkar**, are awarded with colour coats and are selected up to state/national level. During 2010-11 to 2014-15, 2 students are selected for national level-**Anvetion**, 11 students for state level-**Avishkar** and 17 students for University level research festival **Avishkar**.

- College has organised one national level conference jointly by Physics & Mathematics Department, one state level student's summit by Microbiology Department, one workshop by Chemistry Department, one workshop by Botany Department and various students seminar, competitions are also organized by various departments.

- Organized Science Exhibition 'Science Pundit' on 28<sup>th</sup> Feb every year to observe National Science day, in which school and college students participate and exhibit models and posters.

- Research guides select their students on the

Motivate the teachers and students to participate in research activity, seminar, workshop etc.

Promote students to participate in research festival AVISHKAR organised by the University

Create research awareness by organising seminar, workshop and science exhibition for students and staff

Promote to develop

scholarly research and professional standard.

Encourage to explore the faculty to publish research articles, papers in journal and paper to present papers in conferences/ seminars/ workshops

Provide better research facility

basis of their PhD Aptitude Test results and prescribed norms by the University.

- Topics are selected by the research students in consultation with the guides.
- During 2010-11 to 2014-15, faculties sent their research papers for publication in peer reviewed national and international journals. Overall 97 research papers are published in journals and 168 papers are presented in seminars /conferences/ workshops.
- Reformed well developed infrastructure.
- New well equipped, well furnished Microbiology and Chemistry laboratories are constructed by the college management.
- New laboratory materials and equipments are purchased as per research requirement.
- Internet browsing is made possible through network resource centre (NRC), broadband connection and Wi-Fi.

### **3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?**

#### **§      Autonomy to the principal investigator**

- Research scholars, staff and students are encouraged to register for PhD and to apply for minor and major research project.
- Principal Investigators have necessary freedom to pursue their research project/work as per the plan and progress.
- They have full freedom in deciding the research area, research methodology, choices of books, instruments and equipments for conducting the research projects/work.

#### **§      Timely availability or release of resources**

- The college authority always tries to pursue the release of funds for seminar, conferences, workshop organised by the departments and to the principal investigator of minor and major research projects as per the norms and rules of the funding agency.
- The college readily steps in with financial assistance when there is a time

gap between acceptances, sanctioning and actual release of the finance/grants from the funding agencies.

- Grants received from funding agencies are as follows:

Sr No	Schemes	Grants received	Funding agency	Periods
1	Major and Minor Research Projects	24, 59, 800/-	UGC	2010-11 to 2014-15
2	National conference	1, 00, 000/-	UGC	2010-11
3	workshop and students summit	80, 000/-	University	2010-11 to 2014-15
	Total grants received	<b>Rs. 26, 39, 800/-</b>		

#### § Adequate infrastructure and human resources

- College has well developed infrastructure facilities for students, staff and researchers. Well equipped infrastructure facilities for research are developed in PG lab of Microbiology and Chemistry, whereas Biochemistry laboratory and Zoology research lab is renovated through college management funds.
- A portion of research grant received is utilised by the college for purchasing new sophisticated instruments. Besides, the faculty members who have research projects purchase laboratory instruments and books from project funds as per requirement.
- All departments are provided with computer and internet facilities.
- To enrich human resource post graduate students are selected as research fellows for research projects and clock hour basis teachers for teaching. Through fellowship and remuneration, scholars pursue their doctoral degree simultaneously.
- **Miss Priti Sharma** is working as a research fellow for the major research project under Principal Investigator Dr. V.D. Nanoty.
- Research scholars are working as clock hour basis teacher while doing their PhD work and thus getting financial support for research.

#### § Time-off, reduced teaching load, special leave etc. to teachers

- Faculties are encouraged to participate in research and paper presentation in seminars/conferences /workshops by granting duty leave.
- There is no provision to reduce the teaching load/workload of the Principal Investigator as teaching and research are going side by side. Some time

internal adjustment and sharing by colleagues, make it possible for staff to pursue their rigorous research work.

§ **Support in terms of technology and information needs**

- College provides ICT enabled facilities in each department through computer, Internet, projectors etc.
- Departments are equipped with computers and internet facility through broadband and Wi-Fi.
- Each department has their departmental library with books and journals.
- The college has well furnished, computerised library having more than 30,000 books including text books, reference books, journals and periodicals of various subjects. Under the INFLIBNET, N-LIST programme of the library, more than 5000 e-journals and e-books are available for reference.
- Library provides Xerox facilities for reference books and research material.
- The college library has UGC assisted Network Resource Centre (NRC), where students and faculty access internet for research.
- Each faculty of each department shares their interdisciplinary research information and provides free consultancy to each other. Zoology, Botany and Chemistry faculty take help from Microbiology for performing anti-microbial related tests and departments like Physics, Electronic, Computer Science and IT also take help of each other for research related work.

§ **Facilitate timely auditing and submission of utilization certificate to the funding authorities**

- The faculties and staff of college, facilitate the maintenance of accounts through the use of separate ledger for grants received from funding agencies. Each Principal Investigator makes a departmental stock book to maintain record of their purchase material.
- Materials are purchased as per the rules, regulations and requirements. Within a time of the financial year, audited statements of expenditure and utilization certificate are authorised by chartered accountant are submitted to funding authorities.

§ **Any other**

- The faculty members are encouraged to pursue PhD, to publish research, to submit proposals of seminar, conference, workshop, minor/major research project to the funding agencies and the information regarding them is circulated regularly.
- Students and research scholars are promoted for regular and actively

participation in science festival **Avishkar** and are supervised by involvement of faculty.

### **3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

To develop scientific temper, research culture and aptitude among students various research promoting activities, events of scientific importance and intercollegiate competitions are organised by college. Few of them are as follows:

#### **Students are encouraged to participate in research promoting programs:**

- Students are encouraged to participate in research festival **Avishkar** and promote them for research awareness, competition and study.
- They are also encouraged to participate in workshop, conference and seminar poster competition and oral presentation.
- Awareness of ICT and e-journal are promoted among students through Network Resource Centre which is setup in library.
- Science Exhibition cum competition '**Science Pundit**' is organized on every 28<sup>th</sup> Feb, a National Science and school and college students are invited to participate for competition with their posters and models.
- College has established **Sky Observation Club (SOC)** in collaboration and guidance with **Dr Nitin Oke, NASA Educator** and **President 'Kutuhel Sanskar Kendra'** Akola during 2012-13. SOC provides a platform to create awareness of current astronomical developments among the general public and especially among the science students, to enhance inter disciplinary study and research activities related to the space and space technology in present scenario of globalisation of science. Students are invited to participate in SOC, groups of students are formed giving the name planets and projects are given to the students related to the astronomy, solar planets and space science.
- Guest lectures are organized for the students on recent trends, current issues and topic based on syllabus to make them aware about present scenario. Eminent personalities and academicians are invited for the same.

#### **Promote students to participate in student competition.**

- **ZEBRA** (Zoology Education By Research Activity) cell of Zoology and **MICRAN** (Microbiology Innovative Creations by Research Array for Noble Scholars) of Microbiology has organised essay competitions, students seminars, poster competitions, quiz competitions to inculcate research culture and aptitude among students.
- Students are also promoted to participate in intercollegiate seminar competitions organised by various colleges, Amravati University Chemistry Teachers Association (AUCTA), Mathematics Teachers Association (MTA), Microbiologist Society India (MSI) etc. to inculcate research aptitude in students for expansion of knowledge.

#### **Organization of students seminar based on curriculum**

- Student seminars of UG and PG students are arranged by each department based on curriculum. Students actively participate in seminar in the presence of faculty and deliver seminar on given topic.
- Student seminars improve confidence in students and prepare them for seminar presentation and competition.

**Assignment and projects assignments for students:**

- As a part of curriculum, UG students are assigned to do assignments and projects assignment on various topics including environmental awareness program, global warming, clean water for better health, sericulture, study of insects diversity, check list of local fauna and flora, microbial and antimicrobial test , phytochemical study, water analysis, soil testing, magic eye using LDR, Temperature indicator, sensor etc.
- Topics are either selected by the students or given to the students individually or in group.
- PG students are encouraged to do research through dissertation and projects.

**Organization of study tours, industrial and institutional visits:**

- As a part of curriculum, various departments of college organize Educational Tour / Industrial Visit / Adventure & Environmental Tour for B.Sc.-I,II,III students under the supervision of Principal and Heads of respective departments. Study tour, industrial and institutional visit help the students to know about nature and our surroundings and also to learn soft skill, to understand mechanism and to know about research development in the industries and institutes.

**Felicitation of the students:**

- To promote research culture and inculcate research aptitude among students, research students and PG, UG students are felicitated by offering mementos for achieving prizes and awards in various competitions on every year on 26 Jan Republic Day.

**Achievements and activities to develop scientific temper, research culture and aptitude among students:**

Sr no	Events	2014-15	2013-14	2012-13	2011-12	2010-11
a)	<b>Achievements by students</b>					
1	<b>Avishkar</b> –research competition Colour coat awarded	5- State level 2- National	3	1	00	2
2	Students competition awards	2	11	13	14	16
b)	<b>Activities</b>					
1	Number of B.Sc. students delivering seminars	950	1250	716	371	246
2	Number of M.Sc. students delivering seminars	135	159	72	12	23

3	Guest lectures organized	4	7	3	2	7
4	Study tour/ Industrial/ Institutional visit organized	4	8	11	7	5

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.**

**Guiding student research:**

- Recognized research lab actively involved in research projects and research guides Super vice PhD students for their fruitful results.

**PhD students (2010-11 to 2014-2015) :**

PhD students	Microbiology	Chemistry	Mathematics
Registered	5	4	4
Completed/ Awarded	3	1	2
Submitted	1	2	0

- Faculties are also engaged in guiding the students for project assignments and topic selection and preparation of presentation for seminar, conference, workshop competition etc.
- The B.Sc. and M. Sc students submit the assignment reports, project reports and dissertation in compliance with the advice of the teacher.
- Students, who are interested for participation in university research festival- **Avishkar**, are selected, oriented and guided by College Avishkar Committee under the supervision of Principal and faculty members.
- Students are selected and are awarded with colour coat for research festival as follows**

Sr No	No of Students selected/awarded	2010-2011 to 2014-2015
1	Selected for National level research festival -Anvention	2
2	Awarded with colour coat and selected for State level research festival - Avishkar	11
3	Selected for University level research festival -Avishkar	17

**Leading research projects:**

- College faculties are actively involved in major and minor research projects.
- Major research projects ongoing: 01 (Sanctioned amount- Rs 9,79, 800/-)**

Sr No	Name of Faculty	Department	Title	Agency	Remarks Amount sanctioned
1	Dr. V.D. Nanoty	Microbiology	Analysis of bacterial efficiencies of metal nanoparticles and nanoparticles conjugated antibiotics for diverse biomedical applications in treatment of bacterial skin diseases.	UGC	9,79,800

- **Minor research project ongoing: 06 (Sanctioned amount- Rs 11, 20, 000/-)**

Sr No	Name of Faculty	Department	Title	Agency	Remarks/ Amount sanctioned
1	Dr U.K. Bhaleker	Microbiology	In-vitro assessment antimicrobial properties of metal nano-particals against bacterial skin diseases	UGC	2,00,000/-
2	Dr A.H. Amaley	Zoology	Study of web architecture, silk, silk glands and spinnerets of giant wood spider, Nephila pilipes	UGC	1,35,000/-
3	Dr. P.T. Agrawal	Chemistry	Synthesis of N-Lactosylated 1,2,4-dithiadiazolidines and their antimicrobial activity	UGC	1,30,000/-



4	P.R. Kawle	Chemistry	Synthesis of substituted Pyrazoles and Pyrimidines and study of their antimicrobial activity	UGC	95,000/-
5	R.D. Chandrawa nshi	Physical Education	Vidarbhatil kustigiranna prapthony sadhan suvidha.... 'Survey and phytochemical analysis of some medicinal plants used in diabetes from Katepurna region, Dist. Akola'.	UGC	1,20,000/-
6.	P.M. Khadse	Botany		UGC	4,40,000/-

- **Minor research projects completed: 04 (Sanctioned amount- Rs 3, 60, 000/- )**

Sr No	Name of Faculty	Department	Title	Agency	Amount sanctioned
1.	Dr. V.D. Nanoty	Micro-biology	Studies on antibiotic resistance and MIC of selected drugs against nosocomial bacterial pathogen in Hospital of Akola	UGC	<b>Rs. 90000/-</b> 2008-10
2	Dr. P.P. Deohate	Chemistry	Study of potential of N-aryl/alkyl-S-chloro isothiocarbamoyl chlorides and N-aryl/alkyl isocyanodichlorides in the synthesis of dithiadiazines, thiadiazines, triazines and their antimicrobial activity	UGC	<b>Rs.200000/-</b> 2011-12
3	Dr. S.M. Nagrale	Zoology	Assessment of Insecticidal and larvicidal properties of <i>Parthenium hysterforus</i> (congress grass) on mosquitoes of akola city	UGC	<b>Rs. 30000/-</b> 2011-12
4	Asst. Prof S.W.Bhaware	Mathematics	Mathematical Study of Plane gravitational waves in generalized Peres space time	UGC	<b>Rs. 40000/-</b> 2011-12

- b) College faculties are also actively involved in research work for getting doctorate degree. Out of existing 24 faculties, 13 faculties are PhD holder whereas 6 faculties are pursuing PhD. PhD thesis is submitted by 1 faculty.

**Ph.D awarded and ongoing PhD during 2010-11 to 2014-15:**

<b>Sr. No</b>	<b>Faculty PhD status</b>	<b>2010-11 to 2014-15</b>
1	Completed and awarded Ph.D in Service	6
2	Registered for Ph.D	6
3	PhD thesis submission	1
4	Synopsis submission	-

**3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbining research culture among the staff and students.**

To imbining research culture among staff and student conference, workshop, competitive programmes have organised by the college during the period. They are as follows:-

<b>Sr. No</b>	<b>Programmes</b>	<b>Sponsored/ Organised</b>	<b>Month and Year</b>
1	National conference on "Developing Frontiers of physics, astronomy and Space science"	UGC sponsored, Department of Physics and Mathematics	24-25 <sup>th</sup> Sept 2010
2	Workshop on "Sericulture-Training and Guidance"	Dept of Lifelong learning, S G B A U Amravati and Shri R.L.T.College, Akola	16 <sup>th</sup> Dec 2010
3	'Concept Test in Chemistry' On the occasion of International Year of Chemistry University level	Indian Association of Chemistry Teacher(IACT) and Department of Chemistry Shri R.L.T. College of Science, Akola	17 Dec 2011
4.	intercollegiate Seminar Competition on 'Green Chemistry'	AUCTA and Department of Chemistry, Shri R.L.T. College of Science, Akola	28 <sup>th</sup> Feb 2012
5	University level seminar competition on 'Complex analysis' for	Department of Mathematics	9 <sup>th</sup> Mach 2013

	PG students		
6	Zoology Seminar Competition	ZEBRA cell, Department of Zoology Shri R.L.T. College Akola	11 <sup>th</sup> March 2013
7	State level Microbiology Summit on topic 'Pure water for better health'	Microbiologist Society India(MSI) and MICRAN, Shri R.L.T College, Akola	10 <sup>th</sup> Oct 2013
8	Workshop on "Spectroscopy and stereo-specific perspectives of Chemistry"	IQAC and Department of Chemistry, Shri R.L.T.College of Science, Akola	2 <sup>nd</sup> Oct 2014
9	Science competition and exhibition 'Science Pundit'	Shri R.L.T.College of Science, Akola in collaboration with 'Lokmat Yuva-Next' and 'Balvikas Manch'	On every 28 <sup>th</sup> Feb

**3.1.7 Provide details of prioritized research areas and the expertise available with the institution.**

- College has recognised research centre in Microbiology, Chemistry and Mathematics including 4 recognised research guides (2 in Chemistry, 1 in Microbiology and 1 in Mathematics).
- College has 13 faculty members with PhD degree, out of them 2 are NET qualified and 4 are MPhil. Other 6 faculty members are pursuing PhD and one has submitted thesis, out of them 2 are NET/SET qualified and 4 are MPhil. By considering the work of PhD and MPhil, the research areas of faculty members are as follows:-

Sr. No	Name of the Faculty	Qualification	Department	Prioritized Research Area
1	<u>Dr. V. D. Nanoty</u> *	M. Sc., PhD	Micro-biology	Medical Microbiology
2	Dr. U. K. Bhalekar	M. Sc., PhD	Micro-biology	Medical Microbiology
3	<u>Dr. S. M. Padhye</u> *	M. Sc., PhD	Mathematics	Topology, Spectral theory, Functional

				Analysis, Real analysis, Perturbation theory of linear operations Differential manifold
4	V.L. Ruiwale	M. Sc., M. Phil		
5	Dr. S.W. Bhaware	M. Sc., PhD		General Relativity
6	Ku. S.B.Tadam	M. Sc., M. Phil, PhD ongoing		Topology
7	<u>Dr. P.P. Deohate</u> *	M. Sc., PhD		Organic heterocyclic Chemistry Carbohydrate synthesis
8	<u>Dr. P.T. Agrawal</u> *	M.Sc., M.Phil., PhD	Chemistry	Microwave assisted organic synthesis Carbohydrate synthesis
9	P.R. Kawle	M.Sc., NET, PhD- thesis submitted		
10	Dr. Ashish Sarap	M.Sc., PhD		Carbohydrate synthesis
11	Dr. Kavita Heda	M.Sc., PhD		Carbohydrate synthesis
12	Dr.S.M. Nagrale	M.Sc., NET, PhD		Entomology, Ecology and Biodiversity
13	Dr A.H. Amaley	M.Sc., M.Phil. PhD	Zoology	Toxicology, Physiology, Arachnology Mammalian Reproductive Physiology, Biochemistry, Genetics, Pathology.
14	Dr. S.R. Kohchale	M.Sc., M.Phil. PhD		
15	Dr. R.L. Rahatgaonkar	M.Sc., M.Phil., PhD		Toxicology, Physiology
16	Miss V.N. Badgujar	M.Sc., MPhil, PhD ongoing	Botany	Phyto-chemical and Medicinal Plants

17	P.M. Khadse	M.Sc., MPhil, <b>PhD ongoing</b>		Phyto-chemicals and Medicinal plants
18	Dr. A. G. Thakare	M.Sc., PhD		Palynology
19	P. P. Gedam	M.Sc., SET, <b>PhD ongoing</b>	Physics	Biophysics, gas- sensor
20	R. G. Ghayalkar	M.Phil., M.Sc., NET & SET	Computer Science	-
21	M. R. Ubale, (Librarian)	M.Lib., MPhil	Library	Library information technology
22	R D Chandrawanshi (Director, Physical Education)	M. P.Ed., NET, <b>Ph.D. ongoing</b>	Physical Education	Wrestling, Judo and Sports techniques
23	R. D. Chaudhari	M.Sc. MPhil, <b>Ph.D. ongoing</b>	Electroni c	Biophysics, software.
24	R.G. Chavhan	M. Sc.		-

\* Recognised research guides

### 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

College made efforts to motivate research among faculty members and the students by conducting guest lectures, inviting researchers of eminence during seminar, workshop and conference.

Following eminent academicians and researchers are invited.

<b>Sr No</b>	<b>Resource person</b>	<b>Designation / Institution</b>	<b>Key Address</b>	<b>Programs</b>	<b>Month, Year</b>
1	Dr. Kamal Singh	Vice Chancellor, S. G. B. Amravati University, Amravati	Physics, Astronomy and space science		
2	Dr. Suresh R Naik	Former group Director, ISRO & Chairman of International Space Society, Pune	Chandrayan Mission		
3	Dr. Rajiv Gavai	Senior Professor, J.C. Bose National Fellow, Department of Theoretical Physics, TIFR, Mumbai	Re-creating the Big-Bang	National Conference “Developing Frontiers of physics, Astronomy and Space science”	24-25 <sup>th</sup> Sept 2010
4	Dr M.L. Kurtadikar	P.G. Department of Physics, J.E.S College, Jalna	Astronomy for Amateurs & Researchers		
5	Dr S.K. Pande	Vice Chancellor, Pandit Ravishankar Shukla University, Raipur	Galaxies		
6	Dr. Nitin Oke	NASA Educator, President ‘Kutuhil Sanskar Kendra’ Akola	Astronomy: Past & Present		
7	Dr. Shrikant Ahirkar	Entomology Department Dr Panjabrao Deshmukh Krishi Vidhyapith, Akola	Sericulture	Workshop on ‘Sericulture: Training and Guidance’	16 <sup>th</sup> Dec 2010
8	Shri Devdatta Phadke	District Sericulture Officer	Economy of Sericulture		
9	Dr. P.S. Pande	Head, Department of Chemistry, Shankarlal Khandelwal College, Akola	Retro-synthesis	International year of Chemistry	17 <sup>th</sup> Dec 2011

10	Dr. Shriram Shastri	Scientist, Department of Physics, University of California, USA Sr. Principal	Interaction with Students and college staff	Campus visit to Department of Physics	Dec 2011
11	Dr. H. M. Meshram	Scientist, Discovery Laboratory, Indian Institute of Chemical Technology (IICT), Hyderabad Professor and Ex- Head, P.G. Department of Zool ogy, S.G.B. Amravati University	Guest lecture and Interaction with students	Guest Lecture for students organized by Department of Chemistry,	30 <sup>th</sup> Dec 2012
12	Dr. G.N. Vankhede	Amravati, Ex- Chairman, Board of Stud ies in Zoology, Founder President, Indian Society of Arachnology	Free Economic Service by Spiders: Research possibilities	Guest Lecture for students, Dept of Zoology	26 <sup>th</sup> Feb 2013
13	Mr Uday Vaze	Presidents, 'Shrusti Vaibhav', Akola	Global warming and Mother Earth	Seminar competition, Department of Zoology Wild Life Conser- vation Week, Guest Lecture, Department of Zoology	11 <sup>th</sup> March 2013
14	Dr. Milind Shirbhate	Asst Prof. Department of Zoology, Shankarla Khandelwal college, Akola	Status and Conservation of Indian Tiger	Week, Guest Lecture, Department of Zoology	1 <sup>st</sup> Oct 2013
15	Dr. Prakash Thorat	Sr Faculty, Shri Shivaji Mahavidyalay, Barshi	Pure Water for Better Health	State level Micro- Biology	10 <sup>th</sup> Oct 2013

16	Dr. P. S. Wakte	Head, Microbiology Dnyanopasak Mahavidyalay, Parbhani		Summit, Department of Microbiolog y, Shri R.L.T.Colleg e of Science, Akola	
17	Dr. A. M. Deshmukh	Head, PG Department of Microbiology Osmanabad			
18	Dr. Mukund Bodhankar	Dean, Faculty of Science, Bharti Vidhyapith Pune	Scientific writing	Guest Lecture for students organized by Department of Microbiolo gy	18 <sup>th</sup> Jan 2014
19	Mr Ajay Giri	Educational Officer, Agumbe Rainforest Research Station, Shimoga, Karnataka	Human-Snake conflict mitigations program'	Guest Lecture for students organized by Department of Zoology	31 Jan 2014
20	Mr Madan Junghare	Research Scholar and DA AD Fellow, University of Konstanz, Germany	Opportunities for education and research in Foreign countries	Guest Lecture for students organized by Department of Zoology	22 <sup>nd</sup> Feb 2014
21	Mr Devendra Khaire	Lecturer, Government Vidarbha Institute of Science and Humanities (GVISH), Amravati	DNA fingerprinting and PCR	Guest Lecture for students organized by Department of Zoology	7 <sup>th</sup> March 2014



22	Dr. V. S Jamode	Ex-Professor, Department of Chemistry, S.G.B.A.U Amravati	Spectroscopy	One day workshop on “Spectroscopy and stereo-specific perspectives of Chemistry”	2 <sup>nd</sup> Oct 2014
23	Dr. H. S Chandak	Department of Chemistry G.S. College, Khamgaon.	Stereospecific perspectives of Chemistry		

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

Yet no sabbatical leave is sanction for research activity, as most of the faculties are qualified with degree of PhD, NET/SET at the time of appointment. Faculty who are pursuing for PhD, major and minor research project work did not utilize any leave other than duty leave or leave on duty.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)**

- The college faculties share information with students related to the latest trends, finding in the area of research, science and technology. ‘ZEBRA’ cell of Zoology, ‘MICRAN’ of Microbiology and news display board ‘INFO-CHEM’ of Chemistry display paper cutting, published articles and research notes on the notice board.
- Articles promoting scientific temperament are also published in the college magazine “PRATIBIMB” and other science bulletin like ‘Vidnyanwarta’
- College conducts student seminar competition, aptitude test and organizes workshop conference, guest lectures and assign study projects to create research awareness among the students.
- During NSS special camp students communicate with the farmers and villagers about agriculture practises, bio-fertilizers, awareness of Health and Hygiene, Environment and Literacy, tree plantation, woman empowerment, informing legal aid etc.
- Outcome of the microbial research is shared with neighbourhood pathology and medical hospitals for medical treatment.

**3.2 Resource Mobilization for Research**

**3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

- College has an annual allocation of departmental budget to purchase laboratory material, equipment and chemicals.
- Out of total annual budget allotted to various departments, thirty percent is spent on research activities along with the grant received for major and minor research projects.
- Research recognised centres receive annual lab fees from research scholars enrolled for PhD. The received amount is utilised by research lab for the research purpose.

<b>Department</b>	<b>No. of research scholars enrolled for PhD during session 2010-11 to 2014-15</b>	<b>Amount received from PhD students during session 2010-11 to 2014-15</b>
Microbiology	8 (4 registered + 4 completed)	1, 45, 000/-
Chemistry	7 (4 registered + 3 completed)	
Mathematics	6 (4 registered + 2 completed)	14, 000/-
		<b>1, 59, 000 /-</b>

- During session 2010-11 to 2014-15, UGC sanctioned Rs 67,79,632/-under the major heads of minor and major research project, Basic Scientific Research, Additional Assistance to colleges (grants for equipments) and UGC-Network Resource Centre, for research to the college.

**3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

As such no budget provision for seed money is allocated for research. However those faculties who are in thrust of research are encouraged and are promoted to apply for financial assistance to the funding agencies.

**3.2.3 What are the financial provisions made available to support**

### **student research projects by students?**

As such, there are no financial provisions made available to support the student research projects by the students. However basic facilities and instruments are provided to the students for project work.

- College purchased latest instruments required for students research.
- Internet facilities are made available in college library and department.
- Chemicals and instruments are provided to M.Sc project.
- Library provides INFLIBNET service to facilitate research with upgraded with research journals for references.
- Students are encouraged and are promoted to apply for student fellowship, research fellowship for doing PhD and projects.
- Research fellowships are provided to the student through Major research projects.

### **3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

- College has organized UGC sponsored National Conference on “**Developing Frontiers of Physics, Astronomy & Space Sciences**” (DFPASS 2010) on **24 & 25 September 2010** by Department of Mathematics and Physics. This interdisciplinary conference involved all the departments of the college and successfully endeavours.
- Workshop on “Sericulture: training and Guidance” was organized by the college in association with department of Lifelong learning, SGB Amravati University, Amravati, involving all the faculties for getting training and guidance.
- The various department and staff of the college interact with each other through their research projects and PhD work.
- College students carry out different study projects and research by frequent consultation, sharing instruments and experts available in different departments of college. Department faculties are sharing information, expertise in research areas, instrumental skills and knowledge to needy research students and faculties.
- Inter-disciplinary researches are carried out among Botany- Zoology- Chemistry- Microbiology- Computer science- Physics etc.  
Few examples as follows:
- All research faculties and PG students of Chemistry Department have undertaken antimicrobial evaluation of synthesised organic compound with

the assistance of Microbiology Department for their PhD work, minor research project and MSc dissertation projects.

- Faculty of Zoology has undertaken biochemical analysis of silk during PhD with the assistance of Chemistry Department and has undertaken antimicrobial activity of silk during minor research project work with the assistance of Microbiology department.
- Faculty of Botany has undertaken antimicrobial activity of medicinal plant seeds and bacterial inoculation of *E. coli* with the assistance of Microbiology Department and phytochemical analysis of plant extract is undertaken with the assistance of Chemistry Department while pursuing his PhD. and minor research work.

### **3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?**

- The college has well equipped science laboratory for UG, PG courses and recognised research lab for PhD work.
- Respective heads of the Departments and laboratory assistance maintains all the record of the instrument and equipment in the stock book of the Department.
- Research instruments and sophisticated equipments are issued as per the requirements and care of the instruments be taken by the issuer, students and staff.
- All the available equipments are submit utilised by both the students and staff to carry out research and study projects.
- If needed, as per the research project requirement following equipments of other departments are also made available such as Auto-analyzer, UV and visible spectrophotometer, Water- de-ioniser units, flame photometer, Research binocular microscope, Stereo-zoom research microscope, Image capturing devise and image analysis software, laminar air flow, Digital melting point apparatus, Electrophoresis assembly, Bacteriological incubator, Air sampler, Colorimeter, Oscilloscope etc.
- The college library extends e-facilities and e-resource to the staff and the students to use like NRC (Network Resource Centre), Library INFLIBNET resource, N-list resource, Computers etc.
- Library provides prints facilities and Xerox of old rare and reference books.

### **3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If**

**‘yes’ give details.**

Yes, During session 2010-11 to 2014-15, from UGC under the major heads of minor and major research project, General Development Grants-XI<sup>th</sup> plan, Basic Scientific Research, Additional Assistance to colleges (grants for equipments) and UGC-Network Resource Centre, total funding of Rs 67, 79, 632/- (Rupees Sixty seven Lakh, seventy nine thousand and six hundred thirty two only ) was received for developing research facilities and for enhancement of initiative for capacity building in college

Sr no	Schemes	Grants received	Funding agency	Periods
1	Major and Minor Research Projects (10 minor, 1 major)	24,59,800/-	UGC	2010-11 to 2014-15
2	General Development Grants-XI <sup>th</sup> plan	7,76,832/-	UGC	2010-12
3	Basic Scientific Research	10,00,000/-	UGC	2010-12
4	Additional Assistance to colleges (grants for equipments)	22,23,000/-	UGC	2010-12
5	UGC-Network Resource Centre	2,43,000/-	UGC	2010-12
6	Special grants for enhancement of initiative for capacity building in college	40,000/-	UGC	2010-12
<b>Total Grants :</b>		<b>Rs.68,19,630/-</b>		

\* Grants are utilised as per given heads for developing research facility.

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.**

- The faculty members are encouraged to apply for minor/major research project to the funding agencies
- List of **ongoing and completed** research projects and grants received during the last four years are as follows.

Nature of the Project	Duration Year From To	Title of the project	Name of the funding agency	Total Grant		Total Grant received till date
				Sancti oned	Received	

• **Major Research Projects ongoing:**

Dr. V.D. Nanoty (Microbiology)	2012	Analysis of bacterial efficiencies of metal nanoparticles and nanoparticles conjugated Antibiotics for diverse biomedical applications in treatment of bacterial skin diseases.	UGC	9,79,800/-	6,05,800/-	6,05,800/-
	To 2015					

• **Minor Research Projects completed:**

Dr V.D Nanoty (Microbiology)	2009	Studies on antibiotic resistance and MIC of selected drugs against nosocomial bacterial pathogen in Hospital of Akola	UGC	90,000/-	90,000/-	90,000/-
	to 2011					
Dr. P.P Deohate (Chemistry)	2010	Study of potential of N-aryl/alkyl-S-chloro isothiocarbamoyl chlorides and N-aryl/alkyl isocyanodichlorides in the synthesis of dithiadiazines, thiadiazines, triazines and their antimicrobial activity	UGC	2,00,000/-	2,00,000/-	2,00,000/-
	to 2012					
Dr S.M.Nagrle (Zoology)	2010	Assessment of Insecticidal and larvicidal properties of Parthenium hysterforus (CongressGrass) on Mosquitoes of akola city”	UGC	30,000/-	30,000/-	30,000/-
	to 2012					

Dr. S.W.Bhaware (Mathematics)	2010 to 2012	Mathematical Study of Plane gravitational wave in generalized Peres space time	UGC	40,000 /-	40,000/-	40,000/-
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• **Minor Research Projects ongoing :**

Dr U.K.Bhaleker (Microbiology)	2012 to 2014	In-vitro assessment antimicrobial properties of metal nanoparticals against bacterial skin diseases	UGC	2,00,00 0/-	1,60,000/-	1,60,000/-
Dr A.H.Amaley (Zoology)	2012 to 2014	Study of web architecture, silk, silk glands and spinnerets of giant wood spider, Nephila pilipes	UGC	1,35,00 0/-	90,000/-	90,000/-
Dr.P.T.Agrawal (Chemistry)	2012 to 2014	Synthesis of N- Lactosylated 1,2,4-dithiadi- azolidines and their antimicro- bial activity	UGC	1,30,00 0/-	95,000/-	95,000/-
Prof P.R.Kawle (Chemistry)	2012 to 2014	Synthesis of substituted Pyrazoles and Pyrimidines and study of their antimicro- bial activity	UGC	95,0 00/-	67,500/-	67,500/-
Prof R.D Chandrawanshi Director, Physical Education	2012 to 2014	Vidarbhatil kustigiranna prapt honary sadhan suvidha.	UGC	1,20,00 0/-	1,00,000/-	1,00,000/-
Prof. P.M.Khadse (Botany)	2013 to 2015	Survey and phytochemical analysis of some medicinal plants used in	UGC	4,40,00 0/-	3,45,000/-	3,45,000/ -

diabetes from  
Katepurna  
region,  
Dist.Akola

Interdisciplinary projects	<b>Nil</b>
Industry sponsored	<b>Nil</b>
Students' research projects	<b>Nil</b>
Any other (specify)	<ul style="list-style-type: none"> <li>• <b>Miss Kalpana Palaspagar</b>, research student of Chemistry is selected for UGC granted Rajiv Gandhi National Fellowship for SC, ST Candidate from year 2013-14, with stipend of Rs 16,000/- per month for 3/5 years.</li> <li>• <b>Miss Preeti Sharma</b>, research student of Microbiology is working as research fellow and is getting stipend of Rs 14,000/- per month under Major Research Project of Microbiology.</li> </ul>

### 3.3 Research Facilities

#### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

College is well aware regarding the adequate infrastructural facilities for effective research and takes keen interest and efforts to create and enhance the research facilities to develop quality research. College extends excellent research facilities to the students and research scholar in the form of Departmental facility, library and faculties.

- **Departmental Research facilities:**
- Departmental laboratories of college are well furnished and are highly equipped to facilitate research calibre through sophisticated equipments and instruments.

<b>1</b>	<b>Number of laboratories</b>	19
<b>2</b>	<b>Number of recognised research laboratories</b>	2 (Microbiology, Chemistry)
<b>3</b>	<b>List of sophisticated equipment available :</b>	<b>Department</b>
	Hot air oven, Micro-centrifuge machine, UV and Visible spectrophotometer, Autoclave Digital incubator,	Microbiology , Biochemisrty



Electrophoresis assembly, Laminar air flow, Semi-auto analyser.

Microscope attached SLR Camera, Trinocular and Binocular Research microscopes, Hot air oven, Micro-centrifuge machine, Digital Camera

Botany, Zoology

Conductivity meter, Colorimeter, High precision melting point apparatus, Thermostat, Centrifuge machine, Digital electronic balance, Potentiometer, Ice making machine, Soxhlet apparatus, Water-de-ionizer,

Chemistry

Video-shooting camera, Ultra-sonicator, Digital storage oscilloscope, Cathode ray oscilloscope, Audio frequency generator, Desktop, Laptop, Telescope

Physics, Electronic

Mathematics

- Interdepartmental use of instruments, equipments and expert faculty facilities are provided to the students and research scholars.
- Chemistry and Microbiology has recognised research labs, provided with research facilities to post graduate students, research students and faculties.
- Research materials, instruments and consumable chemicals are provided to the students and faculties.
- The internet connections with broad band facilities are available in all departments. The campus wide Wi-Fi network is also established for accessing the e-learning resources.
- Departments facilitate with departmental library having useful books and journals for research reference.
- Interdisciplinary research facilities are provided by departments as per research requirement like:-

### Departments

Microbiology Department

### Specialization /Facilities provides

- Antimicrobial test, bacteriological study, clinical and medical microbiology study

- Soil testing, water analysis, determination of physiochemical parameters, estimation of chemical samples, Organic heterocyclic synthesis
- Chemistry Department
  - Microwave assisted green synthesis
  - Non-aqueous potentiometric determination
  - Physico-chemical studies of organic compound.
- Mathematics Department
  - Topology, Functional Analysis
  - Perturbation theory of linear operation
  - Spectral theory, Real analysis
- Zoology Department
  - Microphotography
  - Entomology and Arachnology study
  - Genetic screening & Ecological study
- Botany Department
  - Medicinal plants study
  - Chemical analysis of phytoextract
  - Polyneology
- Biochemistry Department
  - Blood grouping, Serological test, Pathological tests, Biochemical analysis
- Electronics, Computer Science and Information Technology Departments.
  - Computational information,
  - Biosensor and Biometrics
- Physics Department
  - Gas sensor,

- **Library Facility:**
- The Library has recently been shifted to a more spacious place.
- The college Library has been developed into a “Knowledge Centre” by making it more user friendly with easy accessibility to both print and e-resources.
- The college library has UGC assisted network resource centre (NRC), where students and faculty access the internet services during working hours.
- The library is equipped with INFLIBNET educational sources of UGC and Government of India.
- N-LIST access is provided and can be accessed by the faculty and research students at anytime either inside the campus or at their residence.
- Wide ranges of e-books and e-journals are also accessed free of cost.

- Library provides Reference Services, soft copies like CDs to both faculties and students.

**Recognised faculties:**

- College having total 4 research recognised faculty that is 1 in Microbiology, 1 in Mathematics and 2 in Chemistry along with 13 research calibre faculties awarded with PhD, 6 NET/SET qualified and 7 faculty's PhD ongoing.
- Most of the faculties are actively involved in research work, major and minor research projects. During 2010-14, over all 10 minor and 1 major research project sanctioned by the UGC.

**3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?**

The institutional strategies for planning and upgrading are carried out jointly by the Principal, IQAC, Research committee and Heads of the departments as and when needed.

**Institutional strategies for planning:**

- College is well aware regarding the adequate infrastructural facilities for effective teaching & learning and calibre research. Infrastructure is enhanced on the basis of student strength, by introducing new courses and various academic programs.
- The college management plays important role in improving infrastructure as per the requirement. It takes keen interest and makes efforts to create and enhance the physical facilities to improve quality research and provide better education.
- In every academic year the infrastructural requirements are presented by the Principal in Local Management Committee Meeting.
- The budget requirements are analyzed and sanctioned by the college management. The budget provision is also made available for the renovation of the infrastructure.
- Principal and IQAC interact with heads and faculties during staff council meetings for research initiating infrastructure facility.
- In addition the college and IQAC apply to Government/University and U.G.C. for additional Grant in aid.
- **Strategies for upgrading and creating infrastructural facilities**
- To meet the needs of researchers in the new and emerging areas of research, college provides departmental upgrading programs with the help of management and grants received from funding agencies like UGC.
- Allotments of partial funds are done to purchase books and journals.
- During last 4 years college has upgraded infrastructural facilities of Zoology, Botany, Microbiology, Biochemistry, Chemistry etc. New research lab of Zoology is upgraded to carry out research projects by the students and faculties.

Biochemistry lab is renovated and is equipped for research. PG lab of Chemistry and Microbiology are upgraded with the help of Management funds.

- Instruments needed for research have been purchased under UGC XI<sup>th</sup> Plan, Basic Scientific Research (BSR) grant and Additional Assistance to Colleges grants. Books and instruments are also purchased under grant of Remedial Coaching whereas competitive related books are purchased under the grants coaching for NET/SET and entry in services for SC/ST/OBC.
- To fulfil the needs of emerging area of research new academic programs of Bioinformatics and Information Technology (IT) are started at UG level and PG Chemistry started from session 2010 and PG Microbiology from session 2011.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years.**

Yes, college has received special grants /finance of Rs 67, 79,832 (Rupees Sixty seven Lakh, seventy nine thousand and six hundred thirty two only) during session 2010-11 to 2014-15,

The grant is utilised to purchase research related material and to create research facilities.

They are as fallow-

<b>Scheme</b>	<b>Instruments /facilities created</b>
<p><b>Basic Scientific Research (UGC-XI<sup>th</sup>Plan):</b> <b>Rs.10,00,000/-</b></p>	<p>Glassware–safety storage cabinet, Chemical–safety storage cabinet, Carboy with stop cock, Respirator N95 Particulate, Safe Skin sterile critical Nitrile glove, Hand operator Vacuum pump, Computer with laser printer, Scanner etc.</p>
<p><b>Additional Assistance (UGC-XI<sup>th</sup> Plan):</b> <b>Rs. 22,23,000/-</b></p>	<p>Research microscopes, Microscope attached SLR Camera, Digital Camera, Visible spectrophotometer, Conductivity meter, Colorimeter, Digital melting point apparatus, Thermostat, Centrifuge machine, Digital electronic balance, Potentiometer, Ice making machine, Hot air oven, Micro-centrifuge machine, Electrophoresis assembly, Autoclave,</p>

<b>General Development Grant (UGC XI<sup>th</sup> plan) and Special grants for enhancement:</b>	Digital incubator, Video-shooting camera, LCRQ meter for oscilloscope. To purchase books, reference journals, development of PG lab and research lab, purchase and maintenance of equipments, field work/study tour etc.
<b>Rs.7,76,832/- +Rs. 40,000/-</b>	
<b>Major and Minor Research Projects, Rs.24,59,800/-</b>	Purchase of books, journals, consumable chemicals, instruments and on other miscellaneous.
<b>UGC-Network Resource Centre (NRC) Rs. 2,43,000/-</b>	<ul style="list-style-type: none"> <li>• Setup e-resource centre in the library,</li> <li>• Purchase computers, scanners and provide internet broadband connection.</li> <li>• Provide internet browsing facilities to students and staffs for research.</li> </ul>

### **3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories**

To provide better research facilities to the students and faculties outside the campus college signed MOUs with neighbourhood colleges, institution and collaborations with other reputed scientific institutes.

College has MOUs and collaboration with

1. Shivaji College of Arts, Commerce and Science, Akola
2. Adarsha Goseva Anusandhan Kendra, Mhaispur, Akola
3. Vitthal Mushroom Industry, Amanatpur, Akola
4. Dr Hedgewar Blood Bank, Akola
5. Jain Irrigation, Jalgaon
6. Microbiologist Society India.
7. Research Project Dry land, Dr Panjabrao Deshmukh Krishi Vidhyapith, Akola
8. Government B. Ed College, Akola
9. Government Public Library Akola
10. NGO, Shrusti Vaibhav, Akola
11. NGO, Kutuhall Sanskar Kendra, Akola

Apart from this, on the recommendation of Head of the Institute, research students and faculties seek the help from different institutes, agencies and industries for their research work.

They are as follows.

1. Department of Entomology, Dr Punjabrao Deshmukh Krishi Vidhyapith, Akola,
2. Central Library, Dr Punjabrao Deshmukh Krishi Vidhyapith, Akola,
3. PG Departments of S.G.B.Amravati University, Amravati,
4. Government Vidharbha Institute of Science and Humanities, Amravati,
5. Central Drug Research Institute, Lucknow
6. Sophisticated Analysis Instrument Facility, Chandigarh.

### **3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?**

- The college has a well furnished fully computerized library having more than 32,000 books including text books, reference books, journals, science newsletters and periodicals of various subjects.
- The library remains open from 7.30 am to 6.30 pm on every working day.
- The faculty, research students and students use library resources like text books, reference books, journals and science newsletters to develop the research knowledge.
- College library has been developed into a “Knowledge Centre” by making it more user friendly with easy accessibility to both print and e-resources.
- The students and research scholars are issued the books for studying at home and also have access to reference section to do the preparation of seminars, projects and dissertation using the library resource.
- To have the awareness of current affairs and recent research status, faculty and students read the newsletters, science magazines and journals.
- The college library has UGC assisted network resource centre (NRC), where students and faculty access the internet services during working hours.
- The library is equipped with INFLIBNET educational sources of UGC and Government of India for sharing of library and information resources and services among academicians and research institutes.
- N-LIST project is available in library which provides access to e-resources to the faculty and research students at anytime either inside the campus or at their residence.
- The wide range of e-books and e-journals are also accessed free of cost.
- Library provides Reference Services, soft copies like CDs to both faculties and students.
- Library provides reprographic facility for rare copies and books.
- Library provides separate reading room facilities.

- PhD thesis, MPhil and M.Sc Dissertation are made available in library to the students for references.

<b>Library facility</b>	<b>In Numbers</b>	<b>Library facility</b>	<b>In Numbers</b>
Subjects Books	32177	NRC e-books	93809
Journals	14	NRC e-Journals	4137
Thesis & Dissertation	25	CDs	131
Magazines	33	Newspaper	16

- Departmental library is available in each department for referring books and journals.
- Each department is furnished with computer and internet connecting broadband facility for faculty and students.

### **3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.**

- College developed collaborative research facilities by MOUs with other colleges and institutions.
- Collaborative minor research project work is going on between Zoology of this College and Physics of Shri Shivaji College of Arts, Commerce and Science, Akola.
- For dissertation and projects PG Microbiology students of neighbouring college are guided by college faculty.
- The research students and faculties seek the help from different institutes and agencies on the recommendation of Head of the Institute for their research work. Library facility of Dr. Panjabrao Deshmukh Krishi Vidyapith, Akola is available to research students and staff for references on the recommendation of Principal.
- Faculty from chemistry are recognised research guides of S.G.B.Amravati University, Amravati, R. T. M. Nagpur University, Nagpur and Gondwana University, Gadchiroli and make available possibilities of collaborative research.

## **3.4 Research Publications and Awards**

### **3.4.1 Highlight the major research achievements of the staff and students in terms of**

- **Patents obtained and filed (process and product)**  
So far, the college has not applied for patents.
- **Original research contributing to product improvement**
- College faculties are positively involved in research which will contribute to product improvement

- Department of Microbiology is engaged in the studies on antibiotic resistance and MIC of selected drugs against nosocomial bacterial pathogen in Hospital.
- It is also engaged in Analysis of bacterial efficiencies of metal nanoparticles and nanoparticles conjugated Antibiotics and In-vitro assessment of antimicrobial properties of metal nanoparticles against bacterial skin diseases.
- Department of Chemistry is engaged in synthesis of organic heterocyclic synthetic drugs and studies on their antimicrobial properties for product improvement.
- Faculty of Zoology carried out minor project on assessment of the insecticidal and larvicidal properties of congress grass on mosquitoes and assess positive output.
- Faculty of Botany is engaged in phytochemical analysis of medicinal plants from Katepurna region of Akola and their use in Diabetes.
- **Research studies or surveys benefiting the community or improving the services**
- Students and faculties develop innovations through research.
- The projects of students, minor/major research projects and PhD research of faculties give positive output to the society for benefiting the community and improving the services.
- The project of PG student Sandip Toshniwal develops low budgets, biogas plant benefiting the community.
- A research work and survey by Zoology faculty on Genetic screening of sickle cell anaemia from Gadchiroli, makes aware the community about causes and need of control measures for improving the community services.
- Research work and survey by Microbiology faculty and researcher on Nosocomial bacterial pathogen in Hospital of Akola and nano particles biomedical application in treatment of bacterial skin diseases provides scientific information and research status which will be helpful to find out remedies on health care of the community.
- Research work and project survey by Botany faculty on some medicinal plants are used in diabetes from Katepurna region, Dist. Akola. These are found to be helpful for the community support services and health care.
- **Research inputs contributing to new initiatives and social development**
- Project work and research output of the faculty such as studies on antimicrobial properties, skin disease treatment, nanoparticle biomedical application, Genetic screening of sickle cell anaemia, assessment of medicinal plant of college will contribute to social development.
- Dissertation and project of Chemistry students on soil fertility test, water analysis, synthesis of antimicrobial drugs and the low budget project of biogas plant of Microbiology student will contribute to initiative for social



development.

- Medical checkups, blood grouping test by Biochemistry and Microbiology students contribute in social and community development.

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

The college does not publish or partner in publication of research journals but reports on research papers of faculties are published in the college magazine **Pratibimb**

**3.4.3 Give details of publications by the faculty and students:**

\* Publication per faculty: Annexure -Crt-III/A

\* Number of papers published by faculty and students in peer reviewed journals (national / international)

\* Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Monographs

\* Chapter in Books

\* Books with ISBN/ISSN numbers with details of publishers

\* Citation Index

\* SNIP

\* SJR

\* Impact factor

\* Books Edited

\* h-index

<b>Sr. No</b>	<b>Department</b>	<b>Name of Teacher Faculties/CHBs</b>	<b>No of Research papers published in journals (National/International)</b>	<b>Impact factor</b>
1	Micro-biology	Dr. V.D. Nanoty	6	
2		Dr. U.K. Bhalekar	5	<b>0.8215</b>
3		Dr. Y.A. Ali*	4	-
4	Chemistry	Dr. P.P. Deohate	25	<b>0.129 to 0.985</b>
5		Dr P.T. Agrawal	14	-

6		P.R. Kawle	6	-
7	Botany	P.M. Khadse	1	<b>2.093</b>
8		Dr. A. G. Thakre	1	-
9	Physics	P.P. Gedam	1	-
10	Zoology	Dr. S.M. Nagrale	3	<b>0.215</b>
11		Dr. A.H. Amaley	6	-
12		Dr. S.R. Kohchale	8	<b>0.215 to 2.191</b>
13	Electronics	R.D. Chaudhari	1	-
14	Mathematics	Dr. S.M. Padhye	8	-
15		Dr. S.W. Bhaware	6	-
16		Ku S.B. Tadam	2	-
17	Library	M. R. Ubale	1	-
	<b>Total</b>		<b>93</b>	

#### Books details:

Dr. P.P.Deohate, Asst Prof, Chemistry acts as co-author of Amravati University Chemistry Teachers Association's "A text book of chemistry for third semester of B.Sc", Prashant Publication, Jalgaon.

Dr. A.H. Amaley, Asst Prof, Zoology acts as a co-author of "Test book of Zoology for Fourth semester of B.Sc", Nabha Prakashan, Amravati.

#### 3.4.4 Provide details (if any) of

##### \* Research awards received by the faculty

Sr. No	Name of Faculty	Department	Research award received	Session
1	Dr A.H. Amaley	Asst Prof., Zoology	Best oral paper presentation in national conference on Arachnology, Walchand College, Solapur	2011-12
2	Dr P.T. Agrawal	Asst Prof, Chemistry	PhD from S.G.B. Amravati University, Amravati	2011-12
3	Dr. S.M. Nagrale	Asst Prof and Head, Zoology	PhD from S.G.B. Amravati University, Amravati	2012-13

4	Dr S.W. Bhaware	Asst Prof, Mathematics	PhD from S.G.B. Amravati University, Amravati	2013- 14
5	Dr S.R. Kohchale	Asst Prof, Zoology	PhD from S.G.B. Amravati University, Amravati	2013- 14
6	Dr. U.K. Bhalekar	Asso. Prof Microbiology	PhD from S.G.B. Amravati University, Amravati	2014- 15
7	Dr A.H. Amaley	Asst Prof., Zoology	PhD from S.G.B. Amravati University, Amravati  Best oral paper presentation in national symposium and workshop on 'Arachnology'  Shankarlal Khandelwal College, Akola	2014- 15

**\* Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**

Sr No	Name of Faculty	Department	Recognition received	Session /year
1	Dr. V. D. Nanoty	Principal, Microbiology	Felicitated for excellent work in Microbiology, Babasaheb Ambedkar Marathwada University, Aurangabad	2011-12
2	Dr P.P. Deohate	Asst Prof and Head, Chemistry	Research recognized guide from S.G.B. Amravati University, Amravati	2012-13
			Research recognized guide from R.T.M.	2012-13

Nagpur  
University,  
Nagpur

3.	Dr P.T. Agrawal	Asst Prof, Chemistry	Research recognized guide from Gondwana University Gadchiroli	2013-14
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**\* Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

Incentives are given to the faculty for receiving recognitions for the research contribution by felicitating them and by offering mementos on 26<sup>th</sup> Jan, on the occasion of Republic Day.

**3.5 Consultancy**

**3.5.1 Give details of the systems and strategies for establishing institute-industry interface?**

- College Principal, IQAC committee, Research committee and All Heads arranged a staff council meeting to develop system and strategies for establishing institute- interface. They have been encouraging the faculty to develop their own departmental systems and strategies to establish institute industry interface.
- As per the guideline decide, permission letters, proposal and initials plans are be sent and study tours, industrial visits be organised.
- The college has arranged invited talks of entrepreneurs, career counselling experts etc., through career and guidance cell and alumni association to interacts with the students and faculties to initiate community and industry oriented projects.
- The industrial and institutional visits organized for students give good exposure and develop skill and knowledge in the students.
- As per system and strategies for establishing institute-industry interface college organized students visit to Leben Pharmaceutical Industries Akola, Parle G Insustries Limited, Shivangi Bakers Pvt. Ltd., Khamgaon; Adarsha Goseva Anusandhan Kendra, Akola; Mushroom Culture Centre, Amanatpur, Akola; Indian Institute of Information Technology, Pune etc., as a part of industrial/institutional study tours to get practical knowledge and experience.

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and**

### **publicized?**

- College society, Principal, Research committee and IQAC to find out the society needed consultancy services of each department and guide them and supports the faculty to utilize their expertise and facilities to promote the consultancy services.
- The expertise available in the institution is publicized through alumni association, notice board, personal contacts, local media and college website.

### **3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

The institution encourages the staff to utilize their expertise and available facilities for consultancy services by –

- Providing basic facilities for consultancy services
- Providing initial financial supports and resources facility.
- Felicitating the staff on important functions in the college
- Giving letters of appreciation.
- The college has provided infrastructure and basic facility to Microbiology for Bio fertiliser production and Chemistry to study of physico-chemical parameters and different types of estimations of sample of project of school and college students.

### **3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

Most of the consultancy services of the college are voluntary and free of cost. The college now has plans of generating revenue through consultancy in the future.

The voluntary consultancy services provided by the departments are as below.

#### **1. Department of Chemistry**

- a. Analysis of drinking and irrigation water.
- b. Analysis of soil.
- c. Determination of physico-chemical parameters and different types of estimations of sample of project of school and college students.

#### **2. Department of Electronics**

- a. Repairing of electrical and electronics instrument.
- b. To design, construct and assemble practical kits.

#### **3. Department of Microbiology & Biochemistry**

- a. Bio fertilizer production and assistance.
- b. Checking of antibiotic sensitivity for pathogenic bacteria.
- c. Qualitative analysis of drinking water.
- d. Blood group and blood sugar checking.

#### **4. Department of Computer Science & information Technology**

- a. Installation of software and hardware
- b. Website designing, services for accounting and payroll software.
- c. Maintenance of Biometric machine software.

- d. Computer literacy training program for teaching and non-teaching staff.
- e. ICT training program.

### **5. Physical Education**

- a. Physical fitness training.
- b. Coaching of wrestling, boxing and judo.
- c. Organization of inter-collegiate tournaments.
- Director of Physical Education provided consultancy without any fees for social responsibility.
- The required sports equipments were purchased by the assistance of UGC Scheme.
- An Astronomical telescope was purchased along with two binoculars under 'Educational Innovation' by the college under development grants of the UGC XIth plan during the session 2012-13.
- College has established "**Sky Observation Club**" under the guidance of Dr. Nitin Oke, President, 'Kutuhil Sanskar Kendra' Akola for the students and staff who are interested in astronomy and space science.

### **3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?**

The consultancy services being voluntary, very nominal income is generated which is then utilised by departments for their regular expenses.

### **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

#### **3.6.1 How does the institution promote institution-neighbourhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

- College promotes institution–neighbourhood-community network by organizing extension activities in and outside the campus throughout the year to engage the students in community oriented activities to develop a sense of social responsibility, social services and holistic approach.
- The college has active NSS unit, Red Ribbon Club (RRC), NCC and Sports Extension Club

#### **National Service Scheme (NSS)**

- College has 200 volunteers of NSS unit with 2 faculty members as Program Officer.
- NSS organizes and conducts various activities and programmes as part of regular and residential camp activities.
- These activities create a healthy rapport between the college and community.
- Their activities are as follows

<b>Days</b>		<b>NSS regular activities :Celebration of Important days</b>
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9 August	Krantidin
15 August	Independence day celebration
20 August	Late Rajiv Gandhi Jayanti
5 September	Teachers day celebration
6 September	International literacy day
24 September	NSS foundation day
2 October	Mahatma Gandhi and Lal Bahadur Shastri Birth Anniversary.
1-7 Dec	AIDS awareness week (red ribbon club)
24 December	Blood donation camp.
3 January	Savitribai Fule Jayanti.
12 January	Birth anniversary of Swami Vivekananda
25 January	National Voter day
26 January	Republic day Celebration
19 Feb	Shivaji Maharaj Jayanti
23 Feb	Sant Gadge Baba Jayanti

- NSS volunteers also participate in many programmes organized by college.
  1. Rallies for 'Swachya Bharat-Swastha Bharat abhiyan'.
  2. Rallies for 'Voter awareness campaign'.
  3. Rallies for 'Save the Girl Child' and 'Jagar Janiwancha'.
  4. Rallies for 'Say no to polythene'
  
- Beside this College NSS unit organizes every year the residential camp in adopted village during the last week of December or first week of January,
 

The various social activities are taken during the NSS residential camp.

  1. Health Checkup camp for villagers
  2. "Mahila Melawa": Woman awareness camp
  3. Legal literacy by college legal club with help of district magistrate
  4. Donation of school material and sport instrument
  5. Sickle cell checkups camp
  6. Rally for plastic eradication
  7. Street play on subject "save farmers"
  8. Distribution of blankets, books, medicine
  9. Rally on swach bharat abhiyan under the MUNIJAN(Maharashtra University National Initiative: Joint Action Now)
  
- All these events in residential camp create a social and moral responsibility in students and also create a sense of awareness in rural people.
- **Red Ribbon Club (RRC)**
- Under NSS unit there is a Red Ribbon Club funded by Maharashtra State AIDS Control Society, Mumbai,
- Red Ribbon Club works for awareness building among the students and community people about HIV/AIDS.
- Every year college Red Ribbon club organised World AIDS awareness Day programs in first week of December.

- The club also organizes contest, poster presentation, rally and awareness seminar on HIV/AIDS.
- Late Principal M. G. Joshi death anniversary is observed as 'Blood Donation day' on 24<sup>th</sup> Dec, and students, staff are enthusiastically participates to donate blood. Blood was collected under guidance of expert team from District General Hospital, Akola.
- **National Cadet Corps:**
- College has NCC with cadet strength 40 to 50 with NCC care taker allotted by Maharashtra Battalion, Akola.
- NCC cadets participate in various special camps where basic military training in small arms and parades are given to develop capacity among students to meet emergencies and natural disasters.
- Their regular activity is to practice parades and they also participate in state level parades on Independence Day, Republic Day aiming to develop a sense of national integration among students.
- Apart from this NCC cadet also take active participation in Blood donation camp and donates blood.
- **Sports Extension Club:**
- College has sports extension club, under the guidance of Director, Physical Education.
- It provides training and coaching for Judo, wrestling and Boxing to the needy and interested poor students of school and college.
- Apart from this ZEBRA cell of Zoology and MICRAN of Microbiology provides research based projects like qualitative analysis of drinking water and irrigation water, soil analysis, blood grouping, medical camp, field trips and medical survey etc. for the students.
- College also organised various programs and workshop on values and moral education and aware the students and participants from different school and college about our moral and ethical values.
- After getting admitted to UG classes the students are offered a number of options to join the above mentioned associations and thus encouraged to work in the villages, nearby areas and on the national issues.
- The best volunteers are rewarded by the college in annual social gathering and weightage is given while selecting the best student for the annual best student award.

### **3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?**

The College encourage the students to involve in various social activities through participation in various activities organized by NSS, RRC and NCC.

- Students are encouraged to join and complete any one of these extension activities:



- National Service Scheme (NSS)
- National Cadet Corps (NCC)  
Students are informed by notice and forms are distributed for enrolment.
- The regular activities and annual residential camp are being organized by the NSS unit wherein they learn to take up social responsibilities and become responsible citizen of the country.
- The students organized many events like Tree Plantation, Blood Donation, Traffic Awareness, female foeticide awareness rallies, Say No to polythene campaign and many other programmes. These activities encourage interpersonal interactions that are good for building a strong civil society.
- The NCC cadets are given basic military training in small arms and parades in special camps to develop overall qualities among the students and to make them useful citizen
- The activity started by Government of Maharashtra MUNIJAN (Maharashtra University National Initiative-Joint Action Now ) for environment awareness program, college encourage the students to keeps college premises clean and runs the program near the college campus and in the adopted village.
- The college tracks student involvement in social activities by guiding and encouraged them to participate in events having social relevance and aware them about social responsibilities.
- Apart from this following mechanism to track students' involvement in various social movements
- Provision of incentive marks to the students of NSS and NCC by the university.
- Certificates of every social activity are given to students in social gathering.
- Best NSS volunteer award by college
- Choosing the best student for the annual award.

### **3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

- The college has local Management Committee (LMC) in which principal and committee propose the planning for quality of institution.
- The institution always solicits the stakeholder perception (like the students, parents, Alumni and the eminent persons from the city) on the overall performance and the quality of the education being imparted by the institution.
- The guardians of students can directly put forth suggestions and complaints to the head of institution through letters, drop boxes, emails, which are very well taken care of while implementing any new policy or reform.
- There is provision where the parents, students and alumni of college meet the Principal to give valuable inputs regarding new courses, extra-curricular activities, innovative ideas and programmes which help the students in their professional efficiency and holistic development.

- The stakeholders are always keen to see that quality of higher education be improved in the institution.
- The comments of LMC, SRC Staff Council, Alumni and eminent educationists and prominent personalities are evaluated and implemented as and where required.
- Regular meetings with staff, Heads of Department are conducted in order to keep every member updated about changes and developments in the college.
- Inter and Intra departmental meetings are regular feature to monitor the progress of student, and the performance and requirements.
- Parents/Guardians SRC and alumni have frequent interaction with the Principal opinion are considered with respect. Key aspects like industrial visits, discipline, placements are given utmost priority.
- The college has Parent –Teachers Association Teacher- Guardine Committee, Alumni Committee, Teachers Evaluation Committee and Redressal Committee which meet the Coordinators and Principal.
- Their complaints, suggestions and clarifications are addressed to in the best possible manner.
- Alumni Association organizes meetings and has regular formal and informal interactions wherein any alumni are free to give their suggestions.
- These inputs are analyzed and discuss in staff council to initiate appropriate and correct measure to rectify the lacunas if any.

**3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

- College has active N.S.S., NCC, Sports Extension unit and cultural committee through which number of extension programs are organised every year.
- Every year at the beginning of session advisory committee of college (Local Management Committee, NSS advisory SRC) plans various extension activities under the chairmanship of principal.
- These planning programs are evaluated on the basis of three component namely Participation, Cooperation and Leadership.
- The students participate in many cultural Programmes and competitions like Essay writing, Quiz, Debate, Elocution, slogan writing and poster-making. They also celebrate important days of national and international importance. The students in collaboration with NSS, NCC take parts in many events like
  1. Tree Plantation,
  2. Blood Donation,
  3. Traffic awareness
  4. seminars, female foeticide awareness rallies for save farmers
  5. Say No to polythene campaign
  6. Workshop seminar and social program on sant gadge baba, swami vivekanandand Dr. B. R. Ambedkar etc.
  7. Voter awareness camp
  8. Swachh bharat abhiyan under MUNIJAN Govt. of Maharashtra

9. Eco friendly Raksha Bandhan

- These activities encourage interpersonal interactions that are good for building a strong civil society.
- These activities positively impact students' emotional, intellectual, social, and inter-personal development. By working together with other individuals, students learn to negotiate, communicate, manage conflict, and lead others.
- These programmes sensitize the student volunteers to the social issues and challenges of the lesser privileged sections of society.
- This training equips them for real life situations and makes them more responsible citizens.
- Involvement in activities helps students mature socially by providing a setting for student interaction, relationship formation, and discussion.
- Working outside the classroom with diverse groups of individuals allows students to gain more self- confidence, appreciation for others' differences and similarities. These activities help them to become good leaders.
- All the activities are performed as per grants allocated and received from funding agencies and university etc.

Sr No	Sessi on	Budget for NSS Special Camp	Budget for NSS and RRC Regular Activities	Budget for Social activities, programmes etc
1	2010-11	30,000/-	39,000/-	10,000/-
2	2011-12	45,000/-	45,000/-	10,000/-
3	2012-13	45,000/-	45,000/-	10,000/-
4	2013-14	45,000/-	50,000/-	10,000/-
5	2014-15	45,000/-	45,000/-	18,000/-

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

- **National Service Scheme (NSS):** Shri R. L. T. College of Science has always tried to keep social justice with the society under guidance of Principal of college, with the cooperation of The Berar General Education Society. Our principal Dr. V.D. Nanoty has worked as programme officer for more than 12 years. He was also the member of Advisory Committee of NSS university body. Worth mentioning contribution at his credit in NSS coordinator of Akola District for more than 6 years. He was also selected as

best NSS officer of S.G.B. Amravati University in 1999-2000. He as conducted more than 16 NSS camp in villages. With his subject inside and research attitude coupled with cooperative nature is most acceptable in student community and society. Therefore from the beginning our college unit is one of the best unit of NSS in S.G.B. Amravati University.

- Presently **Dr. S. R. Kohchale** and **Dr. Anjali Thakare** are working as programme officers and **Dr. Ashish Sarap** is working as a supportive programme officers.
- NSS is only activity which runs by non political organization of India. In order to promote the students to participate in NSS following actions are taken
  1. At the beginning of the session, address of principal to students is arranged where principal tells students about various activities of college including NSS. In same function, program officers guide and introduce NSS and its activity to attract the students.
  2. At the inauguration of NSS program, every student is invited to attend the program where well known personalities from NSS are invited for the guidance.
  3. In inauguration program, the program officers highlight all NSS activities and benefit of NSS like
    - a) Students are benefited by intensive 5 marks /semester
    - b) Students are made aware about residential camp in adopted village, 100 students are allowed to attend camp without sharing money.
  4. Students get participation certificate in residential camp
  5. Students get certificate from S.G.B. Amravati University, Amravati (Govt. of Maharashtra) which has a value during interview.
  6. Students can participate in various events of university through NSS
  7. Students can get chance to develop leadership quality and personality development.
  8. Students are awarded as best volunteers award.
  9. Notice boards are used for information of NSS activities.

Following activities/programmes are organized by NSS unit in session 2013-14.

#### **Regular Programs of NSS during Session 2013-14**

<b>Days</b>	<b>NSS regular activities</b>
10 June 2013	Guest lecture on how to increase memory power.
6 August 2013	Advisory meeting of NSS
7 August 2013	Inauguration of N.S.S. unit
9 August 2013	Krantidin
15 August	Independence day celebration
20 August 2013	Late Rajiv Gandhi Jayanti.
5 September 2013	Teachers day celebration
6 September 2013	Competition on “Narendra Dabholkar’s view” on international literacy day
24 September 2013	NSS foundation day
2 October 2013	Mahatma Gandhi and Lal Bahadur Shastri Birth Anniversary.
1-12-13 to 7-12-13	AIDS awareness week (red ribbon club).
24 December 2013	Blood donation camp.

3 January 2014	Savitribai Fule Jayanti.
12 January 2014	Birth anniversary of Swami Vivekananda.
26 January 2014	Republic day Celebration
5 February 2014	Workshop on AIDS awareness

**Special Residential Camp –(26/12/13 to 02/01/14) Village : Sonala**

Days	NSS Residential Camp activities
26-12-13	Students arrival at camp place /discussion with villagers.
27-12-13	Inauguration, Bhajan Sandhya on “ Gadge Baba’s Dashsutri”
28-12-13	Lecture on “Varadi Katha Kathan” awareness through Kirtan By Kute Maharaj
29-12-13	Lecture on “Environment Protection need of today” by Rajaram Mhatre, Lecture on “Personality Development” by Vivek Hivre.
30-12-13	Sickle cell anaemia checks camp for villagers and lecture on sickle cell anaemia by Dr. Dilip Sarate.
31-12-13	“Lecture on Vidnyan and Adhyatma”
01-01-14	Lecture on “Women empowerment programme, and free seed distribution by “Shrushti vaibhav”, Guidance on legal rights by Judges of session court.
02-01-14	distribution of school material and sport material to school children of adopted village.

**Achievements of Faculty in NSS:**

- Dr. P. P. Deohate and Dr A.H.Amaley received appreciation by the hands of Vice chancellor S.G.B.A.U. Amravati in 2010-11 for organizing residential camp.
- Dr. S. R. Kohchale got felicitated by Dean Govt. Medical College, Akola (2013-14 and 2014-15).

**Achievements of NSS students:**

S.N	Year	Achievement	Name of Students
1.	2013-14	National R. D. Parade, New Delhi.	Urja Shah
		Participation in National camp at Tejpur, Assam.	1.Artil Dahibhate
		State level R. D. Parade, Marine Drive, Mumbai.	1.Amol Deshpande
		Participation in State Disaster management camp, and won prize in Univerity group.(Avhan-2014)	1.Diguvijay Borde 2.Soniya Nagre
2.	2014-15	Participation in Bhartiya Chhatra Sansad. At Pune.	Akshay B. Rathod

**National Cadet Corp (NCC):**

- The college has enthusisastic NCC unit consisting of NCC captain Dr. U. K. Bhalekar, NCC care taker Prof. R. D. Chaudhari, Prof P. P. Gedam and 50 NCC cadet.

- NCC has its unique importance. NCC unit provide following help to create social awareness discipline and Unity in students. Programs are run by NCC unit under 11 Maharashtra Battalion NCC Akola.

Table showing participation of NCC cadets in various camps.

S. N.	Camp	2010-11 to 2014-
		15
1	Army Training Camp	47
2	Army Attachment Training Camp	39
3	RD camp	4
4	Thal Sena Camp	2
5	Youth Exchange Programm	2
6	Blood donation	14
7	B- Certificates	62
8	C-Certificates	25

#### Achievement of NCC in last four years

S.N	Year	Achievement of NCC	Name of Students
1.	2010-11	Republic Parade at Rajpath Delhi	A. Jagmohan
2.	2011-12	Pre- Republic day Parade,	Amol Deshpande
3.	2012-13	TSC, camp Delhi	Akshay Shrivias
		Republic Parade at Rajpath Delhi	Mohinder Arora
4.	2013-14	Youth Exchange Programme, Singapore (Malasiya)	Mohinder Arora

#### **Extension work & Community Development – Physical Fitness Centre & Coaching in Judo, Wrestling, Boxing**

Apart from NSS and NCC College has active Sport Extension Club which actively extends their service in community development and students progression.

Under the extension and community development, Physical Education director developed a Physical Fitness Centre and Coaching in Judo, Wrestling, Boxing under the guidance of Director R.D. Chandrawanshi, who provide physical fitness training and coaching for Judo, Wrestling and Boxing games to the players of different schools, colleges and players, with no fees and also organised inter collegiate tournament.

Director of Physical Education R.D. Chandrawanshi is very dynamic person with his pleasing manner and palatable personality in variable chosen for various responsibilities not only at college but also at university level, this probably has made him most acceptable and dependable at his place. With his

initiative Physical has started extension activities in the college in the evening from 6 p.m. to 8 p.m. for society. Gymnasium of our college remains open for the people of any group right from child to elder people. They use the facility of Gymnasium. Our college Gymnasium extends facility day by day.

a) **Inter School Tournaments**

Event	2010-11 to 2014-15	
	State Level	National Level
Wrestling	07	00
Judo	31	07
<b>Total</b>	<b>38</b>	<b>07</b>

b) **Inter Collegiate Tournaments of S.G.B. Amravati University,**

Event	2010-11 to 2014-15		
	Position		
	I	II	III
Wrestling	06	06	01
Boxing	03	02	03
Judo	05	10	11
<b>Total</b>	<b>14</b>	<b>18</b>	<b>15</b>

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

- To ensure social justice and empowere students from underprivileged and vulnerable section of Society, College has conducted surveys and supported them by carrying out various extension activities.(2010-11 to 2014-15)
- **Health check up camp** – In NSS camp at adopted village Yelwan, health checkup camp was organized. Team expert doctors Dr. Nitin Gaikwad (Patil) and his members examined 118 patients suffering with the various diseases and health problems. Health check up of school children was also carried.
- **Womens convention and awareness campaign** – In collaboration with Vishal Himalaya foundation, Woman’s convention and awareness campaign was conducted by the NSS unit at adopted village Yelwan. Sau. Shubhangi Vaze, member of Vishal Himalaya foundation, Hiral Gawande, reporter of Daily Dainik Divya Marathi guided the women and girls on issues like women’s rights, harassment of women in family as well as at their working places, domestic violence, cleanliness in house, good health habits, small savings scheme etc. Seeds of common plants were distributed to the village people under programme **“Paras-Baag Lau Ya Gram Vikasacha Dhyas Gheu Ya”**
- **Legal literacy /aid club** –Under chairmanship of NSS programme officer, legal literacy/aid club was established. The aim of this club was
- To utilized the energy and talent of the students for dissemination of information about legal aid programmes.
- To create legal awareness amongst the masses,
- To make use of their potential and spirit

- To spread legal awareness.
- To encourage, to empathies and to identify the problems of their fellow citizens in their neighbourhood
- To bring the needy and disadvantaged person accessible to justice,
- In collaboration with club organized district legal services authority (DLSA), Akola
- The legal awareness and assistance programme was organized for the villagers and students. Honourable judge's Resp. Sheikh sir, Resp. Deshmukh Sir and their team guided the villagers and students regarding domestic violence and provisions in law, Mahatma Gandhi Tanta Mukti Abhiyan, Facilities for SC/ST and Laws for the backward castes.
- **Distribution of Medicines** - In NSS residential camp at adopted village Yelwan during the health check up camp medicines collected by NSS students worth Rs. 24000/- were distributed amongst the patients and villagers.
- On the occasion of Savitri Bai Fule Jayanti, NSS volunteers carried out surrey. During this event various program carried out like andhashradha nirmuln by Miss Rekha Lande madam who gave lecture on woman illiteracy and their problems.
- Workshop on "Pure Water for Better Health " was organized by Department of Microbiology for environmental awareness.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

- The extension activities and community experience followed by guided reflection promote and enhances social commitment of students included with personal and academic learning.
- Women empowerment, Human Rights Education and Value Based Courses exposes students to issues of Gender equity, Eco-consciousness and self-esteem which inculcate a sense of social responsibility among students.
- Through NSS and cultural events students get wonderful platform to mingle with each other and learn about culture, traditions and values of people. Cultural programs are organized on cultural day during which students convey the message from their acts and plays.
- Teamwork, Leadership Skills, Time Management, Effective Communication Skills are just a few things students learn while participating and organizing various projects and programmes during residential camp and regular extension activities of the college.
- NCC and NSS help students to imbibe national values and skills. Some activities are particularly suited for inculcating national values in our youths.
- Working outside the classroom during NSS residential camp at adopted village with diverse groups of individuals allows for students to gain more self-confidence and appreciation for others' differences and similarities.
- Working together with other individuals, students learn to negotiate, communicate, manage conflict, and lead others.
- Involvement in these activities helps students to mature socially.



**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

- The college ensure the involvement of the community in its reach out activities and contribute to the community development through NSS, RRC, NCC and extension activities.
- **Social and Environmental Awareness Program:**
- During NSS special camp organised at adopted village, students encouraged to visit villagers, to aware their problems and to contribute to the community development.
- Medical officers from Civil Hospital invited for awareness programmes on HIV/AIDS
- Social and legal aid awareness programs organized in collaboration with district legal services authority (DLSA), Akola
- Team expert doctors Dr. Nitin Gaikwad (Patil) and his members examined 118 patients suffering with the various diseases and health problems.
- **Community participation in extension work:**
- The college ensure a constant rapport with the local community through Collaboration with NGOs like **Shrusti Vaibhav** and **Kutuhel Sankar Kendra** towards building up a strong community-institution network through extension activity.
- Woman's convention and awareness campaign was conducted in collaboration with Vishal Himalaya foundation,
- Conducting village cleanliness programs, initiate to encourage community participation in its activities
- College sports department run a sport extension club through which sports training, judo wrestling training and platform are provided to poor students of the society.

**3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.**

The college has developed the constructive relationship with the local institutions for working on following activities:

- **Blood Donation Camp** are organised in collaboration and under the guidance of experts doctors team from **District General Hospital** and **Hedgewar Blood bank**.
- **National Science Day** is observed in collaboration with 'Lockmat Yuva Next' and **Balvikas Manch**.
- Workshop on "Sericulture: Guidance and Training " was organised in collaboration with S.G.B. Amravati University, Amravati and with the guidance of expert faculties from **Department of Entomology, Panjabrao Deshmukh Krishi Vidhyapith and Sericulture Centre, Akola**

- National conference on “**Developing Frontiers of Physics, Astronomy & Space Sciences**” was organized and “**Sky Observation Group**” was established in the collaboration with Director Dr Nitin Oke ‘**Kutuhel Sanskar Kendra**’ Akola,
- Student summit is organized on “**Pure Water for Better Health**” by Microbiology Department in collaboration with **Microbiologist Society India (MSI)**.
- Field visit to mushroom culture centre is arranged for guidance about operating process of mushroom cultivation in details in the collaboration with **Vitthal Mushroom Industry, Amanatpur, Akola**
- College work as a **Regional Controller of MTS Examination** in collaboration with Wadia College, Pune who is main organisers of **Maharashtra Talent Search Examination & Graduate Excellence Examination**.
- College extended infrastructural support for the conduct of **UPSC Entrance Test** on behalf of **Dr Ambedker Competitive Examination Centre, YASHADA, Pune**.
- College has been acknowledged as an efficient centre of science Olympiad examination conducted by **Science Olympiad Foundation, New Delhi**.

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

College has received awards in the form of appreciation and certified for extension activities and contribution to the social/community development as follows:

- Received appreciation and thanks for working as Regional Controller of MTS Examination.  
The prestigious Maharashtra Talent Search Examination was conducted at 690 centres across Maharashtra, Goa and Karnataka. The prestigious college from every region were selected to work as a Regional office and our college is selected as Regional Office for Akola Region
- Received thanks and appreciation for providing infrastructure and manpower for conduction of UPSC Entrance Test on behalf of Dr Ambedker Competitive Examination Centre, YASHADA, Pune.
- Received letter of appreciation from Science Olympiad Foundation, New Delhi for popularisation of Science, Mathematics, Computers & English and achievement of students in the SOF Olympiad exams.
- Received appreciation and awards from Government Medical College and District General Hospital Blood Bank, Akola for organising “Blood Donation Camp” on the occasion of “World Blood Donation Month” 1<sup>st</sup> Oct -31<sup>st</sup> Oct.

- Received letter of appreciation and award from IMA Akola, District Sport Officer and Nehru Yuva Kendra for active participation in IMA Walkathon on 11<sup>th</sup> Jan 2015 in Chief Guest of Padmashree Shri Milkha Singh.

### 3.7 Collaboration

#### 3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- College extends collaboration and interacts with research laboratories and institutes for research activity and supports through MOUs, by sharing facilities, equipment and granting scholarship from UGC.
- Department of Chemistry collaborate with two renowned research institute like Central Drug Research Institute (CDRI), Lucknow and Sophisticated Analytical Instrument Facility, Panjab University, Chandigarh and Adarsha Goseva avam Anusndhan Kendra, Akola
- Department of Microbiology collaborates and interacts with:
  - Adarsh Goseva Plant Akola
  - Shri Shivaji College of Arts, Commerce and Science, Akola
  - Microbiologist Society India
  - Jain Irrigation. Jalgaon.
  - Dry land Irrigation Project etc.
- Department of Zoology took the help from Entomology department and Central Library of Dr Panjabrao Deshmukh Krishi Vidhyapith, Akola
- Department of Botany took the help from Vitthal Mushroom Industrie, Nagarjun Medicinal Plant cultivation centre, Akola.
- **Sharing Equipments :**
  - Department of Chemistry sharing instruments facility like:
    - I R Spectrophotometer facility from Shri Shivaji College, Akola
    - Utility of instrument like Digital Melting Point apparatus, pH meter Spectrophotometer by faculty and research scholar of other institute like R. D. G. College Akola, Shri Shivaji College Akola and Shankarlal Khandelwal College Akola.
  - Department of Zoology and Botany sharing facilities like Stereoscopic

Research Microscope, Stereozoom Microscope, Digital Microscope, image analysis software and image capturing device for microphotography and microtome for microtechniques.

- Microbiology department share facilities with other institutes and within institute for antimicrobial activity.

- **Research Scholarships:**

Kalpana Palaspakar receives Rajiv Gandhi National Fellowship for SC/ ST persuing for Ph.D. from UGC, New Delhi with duration of 3/5 years of Rs 16,000/- per month

Miss Preeti Sharma received Major research project fellowship of Rs 14,000/- per month from P.I. Dr.V.D.Nanoty.

- **INSPIRE (Innovation in Science for Inspired Research) scholarship:**

INSPIRE (Innovation in Science for Inspired Research) scholarship are given for Higher Education to graduate and post graduate students. Total amount of scholarship given is Rs 80,000/- per annum. This scholarship is available for 5 years to complete M.Sc. course

The following students of the college awarded INSPIRE Scholarship:

- |    |                             |         |
|----|-----------------------------|---------|
| 1. | Mr Avinash Khanderao        | 2010-11 |
| 2. | Miss Ankita R. Kabra        | 2011-12 |
| 3. | Miss Manju Pariyani         | 2011-12 |
| 4. | Miss Farheen Bashir Maniyar | 2012-13 |
| 5. | Mr Dyaneshwar Thombare      | 2012-13 |

**3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.**

College is MOUs with following institutes and industries that contributed to the Development of the college, staff and students.

<b>Sr No</b>	<b>MoUs/collaboration with</b>	<b>Institution</b>
1	College	Shri Shivaji College of Arts, Commerce and Science, Akola
2	College Microbiology	Vitthal Mushroom Industry, Akola Hedgewar Blood Bank, Dr. Panjabrao Deshmukh Krishi Vidyapith Akola, Dry land Irrigation Project., Adarsh Goseva Plant Akola Jain Irrigation, Jalgaon

3	Chemistry Collaboration	Microbiologist Society India, Adarsh Goseva Plant Akola, CDRI, Lukhnow and SAIF, Panjab
4	Library	Government B.Ed. College Akola. Government Public Library Akola

**MOUs with different institutes/industries provide:**

1. Facility to use and understand the working principle of sophisticated research equipment and instruments available in the industry and college
2. Guidance about operating processes and supervising the students and staffs
3. Technical training and developing skill in the laboratory

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.**

College has established very good interactions with institution-community that have contributed as:

- **Establishment/Creation/Up-gradation of academic facilities:**
- College library gets facilities of issuing books and reference books from neighbourhood college of BGEs society namely Sitabai Arts college, Akola and is also getting research references from Panjabrao Deshmukh Krishi Vidyapith Library Akola, Government B. Ed College, Akola etc.
- College organised seminar, workshops, and competition and guest lecturers for students and staffs.
- College is a centre for conducting Olympiad Examination organized by Science Olympiad Foundation, New Delhi and is acknowledge for popularisation, guidance and achievement of students.
- **Student and staff support, Infrastructure facilities of the institution:**
- College extends facilities to organizers o MTS examination by working as a Regional Controller of the Examination
- College extends facilities of infrastructure and manpower for conduct of UPSC Entrance Test organized by Dr. Ambedker Competitive Examination centre, YASHADA, Pune.
- On every 24<sup>th</sup> Dec, on the occasion of death anniversary of Late Principal M.G. Joshi, College organized ‘**Blood Donation Camp**’, ‘**Blood grouping and Haemoglobin test**’ for the students and local peoples with the experts Doctors of District General Hospital Blood Bank and interact with the society for their moral responsibilities.

- Every year on 28<sup>th</sup> Feb, on the occasion of ‘Science Day’ college organizes science exhibition and competition “**Science Pundit**” for the students in collaboration with **Lokmat Yuva Next** and **Balvikas Manch**.
- Under the extension and community development, Physical Education developed a Physical Fitness Centre and Coaching in Judo, Wrestling , Boxing under guidance of Physical Director who provides physical fitness training and coaching for Judo, Wrestling and Boxing games to the players of different school, colleges students and players, with no fees.
- Further the centre prepare and encourage the students/players to take part in intercollegiate tournament organised inter collegiate tournament.
- **Placement services :**
- College has a Career and Counselling Cell for college students who has organized workshop on ‘Resume writing and Soft Skill development’ in collaboration with Daily Newspaper, DIVYA MARATHI and has interacted with various organisations such as WIPRO, Infosys, Kotak-Mahindra finance, Cognizant, Apex laboratory, HDFC etc, and has sent the students for placement interview of the students and has contributed in intensifying the placement services o the institution.

**3.7.4 Highlighting the names of eminent scientists / participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

The eminent scientists / participants who contributed to the events (2010-11 to 2014-15) are as follows,

Sr no	Faculty/ Eminent scientist	Depts	dates
1	Dr. Shrikant Ahirkar	Entomology Department Panjabrao Deshmukh Krishi Vidhyapith, Akola	16 <sup>th</sup> Dec 2010
2	Shri Devdatta Phadke	District Sericulture Officer	
3	Dr. P.S. Pande	Head, Department of Chemistry, Shankarlal Khandelwal College, Akola	17 <sup>th</sup> Dec 2011
4	Dr. Shriram Shastri	Scientist, Department of Physics, University of California, USA	Dec 2011
5	Dr. H. M. Meshram	Sr. Principal Scientist, Discovery Laboratory,	30 <sup>th</sup> Dec

		Indian Institute of Chemical Technology(IICT), Hyderabad	2012
6	Dr. G.N. Vankhede	Professor and Ex-Head, P.G. Department of Zool ogy, S.G.B. Amravati University Amravati, Ex- Chairman, Board of Studies in Zoology, Founder President, Indian Society of Arachnology	26 <sup>th</sup> Feb 2013
7	Mr Uday Vaze	Presidents, 'Shrusti Vaibhav', Akola	11 <sup>th</sup> March 2013
8	Dr. Milind Shirbhate	Asst Prof. Department of Zoology, Shankarla Khandelwal college, Akola	1 <sup>st</sup> Oct 2013
9	Dr. M. Bodhankar	Dean, Faculty of Science, Bharti Vidhyapith Pune	18 <sup>th</sup> Jan 2014
10	Mr Ajay Giri	Educational Officer, Agumbe Rainforest Research Station, Shimoga, Karnataka	31 Jan 2014
11	Mr Madan Junghare	Research Scholar and DAAD Fellow, University of Konstanz, Germany	22 <sup>nd</sup> Feb 2014
12	Mr Devendra Khaire	Lecturer, Government Vidarbha Institute of Science and Humanities (GVISH), Amravati	7 <sup>th</sup> March 2014
13	Dr. V. S. Jamode	Ex-Professor, Department of Chemistry, S.G.B.A.U Amravati	2 <sup>nd</sup> Oct 2014
14	Dr. H. S. Chandak	Department of Chemistry G.S. College, Khamgao.	

- UGC sponsored National Conference on “**Developing Frontiers of Physics, Astronomy & Space Sciences**” (DFPASS 2010) is organized on **24 & 25**

September 2010 by Department of Mathematics and Physics.

Resource person	Designation / Institution	Key Address
Dr. Suresh R Naik	Former group Director, ISRO & Chairman of International Space Society, Pune	Chandrayan Mission
Dr. Rajiv Gavai	Senior Professor, J.C. Bose National Fellow, Department of Theoretical Physics, TIFR, Mumbai	Re-creating the Big-Bang
Dr M.L. Kurtadikar	P.G. Department of Physics, J.E.S College, Jalna	Astronomy for Amateurs & Researchers
Dr S. K. Pande	Vice Chancellor, Pandit Ravishankar Shukla University, Raipur	Galaxies
Dr. Nitin Oke	NASA Educator, President 'Kutuhel Sanskar Kendra' Akola	Astronomy: Past & Present

- Department of Microbiology in collaboration with Microbiology Society India & Sant Gadge Baba Amravati University, Amravati has organised State level Microbiology Student's summit on **"Pure Water for Better Health"** on **10<sup>th</sup> Oct 2013**.
- Following are the eminent scientists who contributed to this event:

Sr No	Resource person	Designation /Institution	Topic
1	Dr. Prakash Thorat	Sr Faculty, Shri Shivaji Mahavidyalay, Barshi	Pure Water for Better Health
2	Dr. P. S. Wakte	Head, Dept of Microbiology Dnyanopasak Mahavidyalay, Parbhani	
3	Dr. A. M. Deshmukh	Head, PG Department of Microbiology Osmanabad	

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and**



**cite examples (if any) of the established linkages that enhanced and/or facilitated –**

- YES. college make 10 MOUs with neighbourhood College, Institutes which provides experts facilities, guidance to the students for their dissertation and projects and to faculties for their research, whereas the collaboration /linkage with AUCTA (Amravati University Chemistry Teachers Association), MSI (Microbiology Society India), MTA (Mathematic Teachers Association) and NGOs like 'Kutuhall', 'Shrusti Vaibhav'etc has benefited to the college by providing valuable supports, collaboration and expert guidance during organising workshop, conferences, seminar, college research events, extensions, consultancy, publication, Science Exhibitions and conducting competitions, tests and placements for the students.
- **Curriculum development/enrichment :**  
The collaboration /linkage with AUCTA (Amravati University Chemistry Teachers Association) contribute towards curriculum development and enrichment of the syllabus, through valuable recommendation from the members of the AUCTA.
- **Internship/ On-the-job training:**  
No provision in the syllabus.
- **Summer placement: NIL**
- **Faculty exchange and professional development :**  
College encourage the faculties to participate in orientation, refresher and training courses, conferences, seminars and Symposia for paper presentation, in the workshops for professional development
- **Consultancy :**  
Various department of College offers consultancy like soil sample analysis, water analysis, Bio fertilizers, microphotography, design, construct and assemble practical kits, website designing etc. All are voluntary
- **Extension:**
- Apart from NSS and NCC College has active Sport Extension Club which actively extends their service in community development and students progression. Physical Education Director provide physical fitness training and coaching for Judo, Wrestling and Boxing games to the players of different schools, colleges and players, with no fees and also organised inter collegiate tournament which achieve state- 38, national-07 at Interschool Tournament , whereas first-14, second-18 and third-15 at intercollegiate tournament of SGB AU,Amravati.
- **Publication:**
- The faculty members from the Department of Chemistry and Zoology published curriculum books for UG students along with the teachers of other colleges in consultation with various subject experts.
- Collaborative research publications are carried out by the Department of Chemistry, Zoology, Mathematics and Botany

- **Student Placement:**
- The placement of students is carried out by the career guidance cell of the college and placement interview are arranged in the campus and off the campus. 14 students were selected by various companies during 2010-11 to 2014-15.
- **Twinning program** : Nil
- **Introduction of new courses** : Nil
- **Student exchange** : Nil
- **Any other** : Nil

### **3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.**

- The college makes systematic and concerted efforts to establish linkages with Institutes, industries and Research Centres for creating an academic environment for promotion of quality. Strong initiatives are taken to promote interdisciplinary Learning
- Principal of the college call the staff council meeting every month, time to time and interact with faculties. The IQAC and perspective committee of the college proactively plan for collaboration and linkage for research, consultancies and extension activities with other institutes, small scale industries, NGOs and others.
- Through the planning, action taken and make a MOUs with other colleges, institution and NGOs for collaboration.
- Letters and proposal are sent to the Authority for consideration.
- Proposals are send to the UGC including the letters of collaboration and support of the NGOs for conducting/organising new courses, seminar, workshops and conferences as per status. National conference, seminar are organized to provide a platform for healthy exchange of ideas.
- The eminent scientists from across the globe are invited to share their views on issues of global significance. This linkage is further strengthened through exchange of mails. Industry academia interface is promoted through industrial visits, invited talks by experts, interaction with scientist, researcher and academician.
- **Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**
- As compared to the last cycle of the NAAC (2009-10), during this period the research is intensively magnified. The research faculties, publications, PhD holder faculties, Ph.D. perusing culties, major research and minor research are increased.
- The college has existing 24 faculty members out of which 13 with Ph.D. degree, out of them 2 with NET qualified and 4 are MPhil. Other 7 faculty member are pursuing their Ph.D., out of them 2 are NET/SET qualified and

- 6 are M.Phil.
- During this four year, 4 minor projects are completed, 6 minor and 1 major are ongoing.
- The college has to plan to establish a meaningful, fruitful linkage between the colleges and industries for improving research, to promote extension activity and to develop consultancy with government/non-governmental organisation and private institutions.

<b>Major heads</b>	<b>Cycle II(209-10)</b>	<b>Cycle II(2014-15)</b>
Research recognized guide	5	4
Research recognized lab	2	2
PhD holder faculty	4	13
PhD Ongoing faculty	5	7
NET/SET Qualified	4	6
Major research project	Nil	1
Minor research project	1 sanctioned, 3 propose	4 completed, 6 ongoing, 2 proposed.
Publications (In Journals)	37	93
Paper presentation	126	168
Avishkar	3	17 University 11 State 2 National
INSPIRE fellowship	-	5

## CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 Physical Facilities

#### 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The institution is well aware regarding the adequate infrastructural facilities for effective teaching & learning. Infrastructure is enhanced on the basis of student strength, new introduced courses and various academic programs. The college management plays important role in

improving infrastructure as per the requirement. It takes keen interest and efforts to create and enhance the physical facilities to provide quality education.

At the beginning of every academic year the infrastructural requirements are presented by the Principal in Local Management Committee Meeting. The budget requirements are analyzed and sanctioned by the college management. The budget provision is also made available for the renovation of the infrastructure. The institution has building committee. In addition the college applies to Government/University and U.G.C. for additional Grant in aid. The institution has invested **Rupees 3.86 Core** for infrastructure in last five years.

The infrastructure renovated and added is as given below:

- Renovation and modernization of an Auditorium Hall of 310.18 Sq.m. having seating capacity 360 chairs.
- Women hostel having intake capacity of 24 students is constructed.
- Renovation of old chemistry lab, physics lab, fisheries lab, & S.R.C. Room.
- Renovation of class rooms 1, 2, 3 each with sitting capacity of 100 students completed.
- Principal's office renovated and antechamber constructed.
- Addition of Zoology research lab, Mathematics Department, six classrooms for Post Graduation courses.
- Addition of New Chemistry laboratories 2 & 3 with all modern facilities (408.77 Sq.m.)
- Addition of new Central Library Building.( 268.00 Sq.m.)
- Addition of PG lab for M.Sc. microbiology
- Addition of sophisticated instruments to almost all departments.
- Addition of generator (10KVA) & online UPS (7.5 KVA) for institution, computer science & I.T. lab.
- Addition of smart classroom.

#### 4.1.2 Detail the facilities available for

- a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.
- b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

a) **Details of the facilities for Curricular and co-curricular activities:**

<b>Sr. No.</b>	<b>Facility</b>	<b>Details</b>	<b>Area</b>	
1	I	Class Rooms (Total)	21	
	II	120 students capacity	3 rooms (2,16,18)	
	III	100 student's capacity.	9 rooms (1,3,5,6,8,13,14,15,17)	
	IV	90 student's capacity.	1 room (21)	1539.50 Sq. m
	V	60 student's capacity.	3 rooms (4,24,26)	
	VI	50 student's capacity.	2 rooms (7,23)	
	VII	30 student's capacity.	2 rooms (22,25)	
	VIII	25 student's capacity.	1 room (12)	
2	Central library	01	268.00 Sq. m.	
3	Laboratories with staff rooms	19	1548.50 Sq. m.	
4	Multipurpose Auditorium/ Seminar Hall	01	310.18 Sq. m.	
5	Seminar Room	01	50.56 Sq.m	
6	N.S.S. & N.C.C. Room& Dept.of Physical Education.	01	40.81 Sq. m.	
7	Record room	01	91.68 Sq. m.	
8	Language Dept.	01		

9	Tutorials	Tutorials are engaged in class rooms	
10	Botanical Garden with plants of different species	01	123.40 Sq. m.
11	Lunch Shade for 50 Students	01	
12	Specialized Facilities and Equipments for teaching, Learning & resources.		
	I Audio – visual Aids & Projector	DLP/LCD projector =11 OHP = 07	
	II Recognized Research Labs/ Department	02 Labs (Microbiology & Chemistry), 01 Mathematics.	
	III INFLIBNET	In Library	
	IV Internet	All Departments & Library	
13	Girl Hostel	01, Capacity = 24 Students	1072.98 Sq. m.
14	Teaching Staff Rooms	01	124.03 sq.m.
15	Girls Common Room	01	51.83 Sq. m.
16	Ladies Staff room	01	8.83 Sq. m.
17	Co-Operative Store	01	
18	Salary earners society office.	01	

**The college is enhancing intake capacity of girl's hostel from 25 to 50 students by using infrastructure of neighboring college of parent management.**

**b) Details of the facilities for Extra –Curricular activities:**

The College has adequate sports materials & infrastructure to enhance students sport skills. It has following facilities.

Sr

Facility

Details

		Boxing, Physical Fitness training, football, Athletics.
1	Outdoor Games	For the outdoor games like football, physical fitness training, the institute provides facility by using other play grounds.( with permission)
2	Indoor Games	Table Tennis, Badminton, Chess, Judo, Wrestling. Equipped with 17 stations Leg Curl (Weight plates in MS) + Leg Extension machine (80Kg), Seated Chest Press Machine(80Kg), Arm Curl Machine (40Kg), High Lat pulley with low Lat Weight 70 Kg, Peck Dec (butterfly) machine (80Kg), Hack squat(80Kg), Abdominal board, Multi Hips, Jogger manual, Standing Twister Steel, Flat Bench, Decline Bench, Incline Bench, Curling Bar24-26MM, Training Bar26-28MM, Dumbbells, and Weight Plates. Dumbbells Rack =0 1, Wrestling mats = 32, Wrestling Dummies = 03
3	Gymnasium	There are two Separate halls for Gymnasium of size (21ft X 25 ft) which remains open in the morning & evening time. The entry to Gymnasium is free of cost for college students, teaching, non-teaching staff members, player of Judo, Wrestling and Boxing of extension work and Community work. Separate time for male and female. <ul style="list-style-type: none"> <li>• The college has magnificent state of art Auditorium to provide excellent facilities for extracurricular &amp; curricular activities.</li> <li>• The auditorium is unique in this region. It has rich infrastructure, a pleasant atmosphere and perfect audio-visual systems. It has an area of 310.18 Sq.m.with permanent stage, Fans, Lights arrangements, Remote Control operated Main curtain.</li> <li>• Sitting capacity 360 chairs.</li> <li>• Excellent <b>acoustics</b> treatment.</li> <li>• It is centralized air cooled and with facilities like green rooms, display screen, modern LCD Projector, Smoke detector, Alarm system, Turbo</li> </ul>
4	Auditorium	

		ventilators, public address system, sound system, and musical instruments.
		<ul style="list-style-type: none"> <li>• Internet connection for presentation of online information.</li> <li>• Adequate stage property for theatre events.</li> <li>• Special room for makeup &amp; rehearsals.</li> <li>• Badminton court for playing badminton.</li> <li>• Generator facility in case of power failure.</li> </ul>
5	N. S. S.	
6	N.C.C.	A well furnished office with necessary facilities.
7	Cultural activities	In auditorium hall.(360chair capacity.)

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

- The institution was established on 1<sup>st</sup> of April 1970 and the infrastructure for existing courses is available as per UGC norms. The development in the infrastructure appropriate to the academic growth of the institution is planned well in advance and implemented at proper pace. The institution has spent Rupees 3.86 Core for infrastructure in last five years.

In last five years:

- An Auditorium hall of 310.18 Sq.m. of modern standards with sitting capacity of 360 chairs renovated and **inaugurated on 13<sup>th</sup> of October 2013 at the hands of Shri Sanjay Dhotre M.P.**
- Girl's hostel with intake capacity of 24 constructed (U.G.C. Grants 60 Lakhs& management 60 Lakhs). **And inaugurated on 13<sup>th</sup> of October 2013 at the hands of Shri Gopikishanji Bajoriya M.L.C.(Alumni of college).**
- Microbiology Laboratory–II for P.G. constructed. **And inaugurated on 13<sup>th</sup> of October 2013 at the hands of Shri Govardhanji Sharma**



### **M.L.A.**

- Two new chemistry laboratories constructed. (Area 408.77 Sq. m.). One separate chemical and glassware storage room, a separate acid and gas cylinder storage room, a nonteaching staffroom, a teaching room constructed. Two gas cylinder chambers outside the laboratories for supply of LPG in three labs. Constructed. **On 2<sup>nd</sup> of October 2014 new Chemistry laboratories 2& 3 were inaugurated at the hands of Hon'ble Vice Chancellor Dr. Mohanji Khedkar of S.G.B.Amravati University Amravati.**
- One old Chemistry Lab renovated.
- Development of Zoology Research Lab, renovated **And inaugurated on 13<sup>th</sup> of October 2013 at the hands of Dr.Ranjit Patil M.L.C.(Alumni of college& presently Minister of state-Home, in the Government of Maharashtra )**
- Fishery Lab renovated and **inaugurated on 13.10.2013.**
- Plastering (inside & outside) of physics Lab. & electrical renovation with new wiring & fittings done.
- Plastering of outer walls of Botany Department completed.
- Room no. 1, 2, 3 with seating capacity of 100 students renovated. New POP false ceiling made & furniture repaired. **And inaugurated on 13<sup>th</sup> of October 2013 at the hands of Shri Haridasji Bhade M.L.C.**
- Lunch Shade constructed for Approximate 50 students near botanical garden.
- Compound wall & new Entrance gate constructed.
- Principal office renovated and antechamber constructed.
- Department of Mathematics & six classrooms for P.G. classes were constructed. **On 24<sup>th</sup> December 2013 in the memory of Late Principal M.G.Joshi, these rooms were inaugurated at the hands of Hon'ble Pro Vice Chancellor Dr. Jaykiranji Tidke of S.G.B.Amravati University Amravati.**
- A new spacious centralized library building constructed (Area 268.00 Sq.Mts )
- Gents toilet near new P.G. Microbiology Lab renovated.
- S.R.C. room renovated.
- Most of Black Boards in class rooms are replaced by green boards,white boards.

- Parking space for student's bikes & cycle floored.
- Online U.P.S. of 7.5. KVA installed for computer and I.T. dept.for uninterruptible power supply.
- Inverters provided in all departments.
- Internet connectivity is provided in all departments.

*In forth coming two months a well furnished central library With All Facilities like NRC, Reading Room, Stack Room, Bar-coding will be inaugurated. These all infrastructural developments in the institution will need approximately Additional Rupees Ito 1.5 cores.*

**Master Plan of the Institution enclosed : Annexure-IV-i**

#### **Optimal use of infrastructure –**

- All classrooms, laboratories, administrative office, gymnasium room with gym equipments, sport equipments are judiciously utilized considering the yearly calendar of events, theory classes, practicals and activity-wise strength of the students.
- The 'sky observation club' run by institution has its own set of telescope and binoculars, other material required in extension activities.
- The auditorium hall is utilized for various academic and extension activities like, seminars, conferences, cultural programme, workshops, guest lectures, training programs, meetings, blood donation camp on 24<sup>th</sup> of December every year, staff meetings send off programme for final year students and retiring staff, or any student related activities and so on.
- Infrastructure facilities are also used by other agencies for conducting various competitive examinations like Banking Recruitment Board, MPSC, MTS, and B.Ed.CET, JEE (main) etc.
- The auditorium hall is also available for recreational facilities like drama, dance and music competition programs etc.
- The college runs continuously from 7.15 am to 6.27 pm.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

Physically challenged students are provided with a separate seating arrangement in their class rooms and in the library. Wheel chair is provided in library. They are provided with a "writer" during

examination. The faculty and non teaching staff fully co-operate with such students.

- Ramp in the Girls Hostel.
- Ramp will be provided in the new central library building.
- Railings are provided for rooms 4, 5, 6 (1<sup>st</sup> floor) and rooms 1, 2, 3 (2<sup>nd</sup> floor).

4.1.5 Give details on the residential facility and various provisions available within them:

**I. Hostel Facility** – Accommodation available, The College has one Women hostel with intake capacity of 24 students.(8 rooms)

**II. Recreational facilities, gymnasium, yoga center, etc.:** 1.Available in women hostel.

1. The college has 360 seater (chair) Auditorium hall.

2. The College has two gymnasium halls in front of the hostel.

**III. Computer facility including access to internet in hostel:** The women hostel is within college premises. The students in the hostel use internet facilities available in college.

**IV. Facilities for medical emergencies:** 1.First aid box in hostel.

2.Sick room in hostel. 3. Doctor on call. 4. All the students are covered under medical insurance.

**V. Library facility in the hostels:** 1.Reading hall in hostel.2. The women hostel is within college premises. There is a reading room with news papers and magazines in library.

**VI. Internet and Wi-Fi facility:** Yes, Through Network resource centres in library and computer / IT department.

**VII. Recreational facility-common room with audio-visual equipments:** 1.The college auditorium is available for recreational facility. 2.There is a common room for girl students. 3. Common hall in women hostel.4.Common room for ladies staff in the college.

**VIII. Available residential facility for the staff and occupancy, Constant supply of safe drinking water:** 1.Water purifier and water cooler is provided in hostel.

2. College has provided three water coolers with water purifiers in campus at different locations for students.

**IX. Security:** 1.Security guard for 24 hours security.2.CCTV vigilance in college campus.

4.1.6 What are the provisions made available to students and staff in terms

of health care on the campus and off the campus?

Following provisions are made available to the students and staff in terms of the health care on the campus and off the campus.

- First Aid Box & fire extinguisher is provided in each department and laboratory.
- The college has group insurance for staff.
- All the students are covered under medical insurance.
- Every year college conducts health checkup for all students. (By Physical Education Department) .For this purpose one Lady Doctor for girl students and one doctor for boys student is invited for thorough checkup of the students.
- Every year, on 24<sup>th</sup> December free blood test camp (blood Group check, sugar level check, and hemoglobin check) is arranged. On this day every year blood donation camp is also organized for students & staff in the memory of late Principal M.G. Joshi in the college.
- For staff health care the college has MOU with well established ICON Hospital, Akola (off the campus).

4.1.7 Give details of the Common Facilities available on the campus–spaces for special units like IQAC, Grievance Redressed unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Common facilities for special units are as given in following table.

Sr. No.	Facility	Details
1	IQAC	IQAC office with computer and internet adjacent to principal’s office
2	Grievance Redressal Units	Ladies staff room
3	Women Cell	01 ladies common room
4	Counseling & Career Guidance Placement Unit	Separate room(room no.12)
5	Health Care Centre	In two halls under physical education

		department.
6	Canteen	Available.
7	Recreational space for student & staff	In auditorium with capacity of 360 chairs, two halls for Gymnasium (indoor), recreational room in girls hostel.
8	Safe Drinking water	Purified Drinking water facilities with water coolers in the premises. (outside library, physics department, electronics department, & in Hostel
4.2	9. <b>Library as a Learning Resource</b>	Separate Vehicle Parking for Boys, Girls & Staff available.
4.2.	10 Auditorium.	Yes,360 seater.

1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes. The college has a Library Advisory Committee as given in following table

Name	Designation	Position
Dr. V.D. Nanoty	Principal	Chairman
Shri M.R. Ubale	Librarian	Secretary
Dr. S.M. Padhye	Asso. Prof.	Member
Shri. R.G. Chavan	Asso. Prof.	Member
Dr. S.M. Nagrale	Asst. Prof.	Member
Dr. S.W. Bhaware	Asst. Prof.	Member
Shri J.W. Wagare	Asst. Librarian	Member
Shri S.G. Solanke	Lib. Clerk	Non-teaching Representative.
Shri W.L.Alimchandani	Lib.Attendant.	Member
Shri G.U.Kolhe	Student	Student Repre.

### **Responsibilities:**

- a. To formulate library Policy and Procurement.
- b. To frame rules and regulations for use of the library.
- c. To check the implementation of library policy by the library staff.
- d. To check the library expenditure and allocate fund for library.

- e. To consider the proposals of the librarian in the matter of developing library.
- f. To consider The Annual Report submitted by the librarian.
  - g. To oversee the work of the library and to promote its usefulness for the students and teachers in fulfilling the objectives of the library

The Library has the following facilities/introduced the following initiatives:

- The Library has recently been shifted to a more spacious one.
- The college Library has been developed into a “Knowledge Centre” by making it more user friendly with easy accessibility to both print and e-resources.
- Network resource Centre in library.
- Xerox facility provided.
- Fire extinguishers are fixed in the library.
- Thought of the day is written by the students every day.
- The librarian and library assistant are there to readily help the disabled if any, in obtaining the library materials.
- Teaching aid materials like Maps, CDs etc., are provided to teachers.
- The Library has eleven computers with Internet facility, a scanner and a printer.
- Library provides Reference Services to both teachers and students.
- Books on competitive examinations are available in good numbers.
- N-LIST access is provided and can be accessed by the faculty and research students at anytime either inside the campus or at their residence.
- The internet access is open to faculty and students during working hours.

#### 4.2.2 Provide details of the following:

Total area of the library (in Sq. Mts.)

Total seating capacity

Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

Total area of the library (in Sq.Mts.) : **268.00** Sq.Mts

Total seating capacity : **50 students + 30 staff = 80**

**Working hours of the Library**

On Working Days	7.00 AM to 6.30 PM
On Holidays	The library remains closed
Before Examination Days	7.00 AM to 6.30 PM
During Examination Days	7.00 AM to 6.30 PM
During Vacation	8.00 AM to 6.00 PM

- Layout of the library: 1. Reading room with chair for student. 2. Comfortable seating (rotating) chairs provided in Network Resource centre.

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

The library follows three steps for purchasing new titles of Books and Journals.

**I:** The library procures the books which are duly recommended by HODs, and teachers by approval form.

**II:** The library procures books from various publishers and suppliers who are supplying regularly. The HODs are invited to approve the books.

**III:** Finally orders are placed to the supplier monitoring the quantity i.e. number of copies of books for each title. After receiving the books, they are checked and the amount is paid. The library committee takes final decision.

**Journals:** The library subscribes to more than 14 Journals/Magazines which are approved by sanctioned departments.

**Amount spent in Rupees on Books, Journals and e-resources (2010-11 to 2013-14)**

Library Holdings	2010-11	2011-12	2012-13	2013-14
Text	59 2,45,879.1	1229 3,58,864.0	<u>30</u>   11204.	10 43896.0

Books	7	5		0		00	9	0
Reference Books	Nil	Nil	03	4,100.00	01	3800.00	02	1095.00
Journals/Periodicals	09	3505.00	14	5000.00	14	5000.00	14	5000.00
e-resources	An amount of Rs 5000 has been spent on subscription of N-LIST and the same is available							
Any other (specify)	There are about 131 CDs on various subjects							

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC
- Electronic Resource Management package for e-journals
- Federated searching tools to search articles in multiple databases
- Library Website
- In-house/remote access to e-publications
- Library automation
- Total number of computers for public access
- Total numbers of printers for public access
- Internet band width/ speed 2mbps 10 mbps 1 gb (GB)
- Institutional Repository
- Content management system for e-learning
- Participation in Resource sharing networks/consortia (like Inflibnet)

**OPAC:**

One computer is exclusively devoted to OPAC.

Electronic resource management package for e-journals: Users can access to a very large number of e-books and e-journals through INFLIBNET / N-List

Federated searching tools to search articles in multiple databases: NA

**Library website:**

There is no separate library website. However library link is incorporated in college website.

**In house/remote access to e-publications:**

Subscription to N-LIST has made it possible to access e-resources 24X7.

**Library automation:**



Library is using SOUL 2.0 library software. Library has in house I-card generation system and in-house barcode and book card generation system.

**Total number of computers for public access: 6**

**Total numbers of printers for public access: one**

**Internet band width/speed: 3 Mbps**

**Participation in resource sharing networks/ consortia: INFLIBNET/ N-list subscribed.**

4.2.5 *Provide details on the following items:*

- Average number of walk-ins
- Average number of books issued/returned
- Ratio of library books to students enrolled
- Average number of books added during last three years
- Average number of login to opac (OPAC)
- Average number of login to e-resources
- Average number of e-resources downloaded/printed
- Number of information literacy trainings organized
- Details of “weeding out” of books and other materials

Details on the given items are given below:

- |   |            |
|---|------------|
| • Average number of walk-ins  | 35/day     |
| • Average number of books issued/returned   | 60         |
| • Ratio of library books to students enrolled   | 11:1       |
| • Average number of books added during last three years                                       |            |
| • Average /year =   | 672        |
| • Average number of login to OPAC<br>monitored (Registered Catalog used- 50 student per day ) | Not        |
| • Average number of login to e-resources  | 20 per day |
| • Average number of e-resources downloaded/printed<br>monitored                               | Not        |
| • Number of information literacy training organized<br>Every academic year                    | Once       |
| • Details of “weeding out” of books and other materials<br>carried out                        | To be      |

4.2.6 *Give details of the specialized services provided by the library*

- Manuscripts
- Reference
- Reprography
- ILL (Inter Library Loan Service)
- Information deployment and notification (Information Deployment and Notification)
- Download
- Printing
- Reading list/ Bibliography compilation
- In-house/remote access to e-resources
- User Orientation and awareness
- Assistance in searching Databases

#### INFLIBNET/IUC facilities

Details of the specialized services provided by the library

- **Manuscripts:** Not provided
- **Reference:** There is a separate reference section attached to the Library with a free access to the readers.
- **Reprography:** Available.
- **ILL (Interlibrary Loan Service):** Inter Library Loan is given to the faculty members in co-operation with sister concerns. The Library is also having MOU with the Govt.B.Ed.College and Govt.Public Library, Akola.
- **Information deployment and notification (Information Development and Notification):** All library notifications are displayed on library notice board. These are normally regarding job, courses, and completions. New arrivals are displayed.
- **Download:** Available
- **Printing:** Printing and scanning facility is given to the student and staff members but on necessity.
- **Reading List/Bibliography compilation:** Library uses SOUL 2.0 library software which facilitates generation of author, title, subject bibliography. This service is being provided by the library as and when demanded.
- **In –house /Remote access to e-resources:** Available.
- **User Orientation and awareness:** User’s orientation is given to the first year students of all courses.
- **Assistance in searching Database:** The book holdings are maintained in MS excel format and the library assists in searching the database.

- **INFLIBNET/IUC facilities:** Library is subscribing N-List from INFLIBNET center.

**4.2.7** Enumerate on the support provided by the Library staff to the students and teachers of the college.

The Library provides support to faculty and students in various ways. These may be enumerated as follows:

1. **Books Friends Group:** This is a unique activity undertaken by the college library. The group has been acting as a platform for book friend students to read and then review well-known books, often in the presence of the author of the book himself. The books are selected with a view of developing the student's personality. While selecting the books for discussion we ensure that reading of these books will assist our students in improving and developing their personality.
2. **Read a book, get a pen:** Under the Scheme students are asked to read a book and submit a one page synopsis of the book read. As an incentive, the student doing this is presented with a pen.
3. **Display of new books, newspaper clipping and employment news:** New books and important newspaper clippings are displayed in display board of the library.
4. **User orientation programme:** These programmes are conducted for fresh students to acquaint them with library facilities.
5. **Exhibition of new arrivals:** The readers are allowed to browse through the books.
6. **Special collection in reference section of the library:** A special collection of sacred books (Bhagavad-Gita etc.) and works of national Leaders such as a Mahatma Gandhi, and Swami Vivekananda are kept for ready reference for the readers. Access to a good number of reference books and encyclopedia is easy. There are also special collections on specific topics like personality development, Research Methodology, Biographies and various competitive examinations.
7. **Special cards and free book bank:** Special cards and free book bank facilities are made available to the students.
8. **Utility Counter:** The College maintains a utility counter where stapler, gum, pins; pen are kept handy to users.

9. **Prompt purchase of books recommended by the faculty:** The library greatly values recommendations of books by the faculty. These are promptly purchased by the library.
10. **Help in locating information:** This is given to both students and faculty for the purpose of research or writing assignments or projects. This is often done through the use of OPAC.
11. **Issue of books with a most number (Liberal) of limit:** Books are issued in most number (liberally) to the faculty and research scholars.
12. **Inter-Library loan facility:** The College has Memorandum of Understanding (MOU) with Govt.B.Ed.College and Govt.Public Library, Akola. Books belonging to these organizations can be borrowed by the staff. Similarly books can also be borrowed from the sister institutions.
13. **Open access:**Open access to the titles in the shelves without any hurdle.
14. **Researcher facility:** Library provides Ph.D.Thesis,M.Phil dissertations,Project reports for reference to new researchers and students.
15. **Question papers:** Compilation of university question papers and distribution services to faculty and students.
16. **Scholar card:** Scholar card is issued to meritorious students.
17. **Career/ employment service:** career/Employment information services are provided to students.
18. **Celebration of library day:** Father of library science Dr.S.R.Ranganthan Jayanti is celebrated every year as a library day.

**4.2.8** What are the special facilities offered by the library to the visually/physically challenged person? Give details.

Extra books are issued to specially challenged students. On their request library service is provided to them at their place. In case of all other facilities, these students receive priority over others.

**4.2.9** Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

The library takes feedback from its users in three ways as follows:

1. **Suggestion box:** The library maintains a suggestion box in the study room. Students are welcome to drop their suggestions in the box.

2. Feedback form: The general feedback forms are distributed to students containing questions with regard to library matters.
3. Library Committee meetings: Since the Library Committee has faculty members as its members; it serves as a good platform for placing faculty observations before the college authorities.  
For instance it was a long standing demand from the library to extend its space to accommodate increased number. This demand was considered by the authorities and the space was extended in the annexe subsequently.

### 4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- Number of computers with Configuration (provide actual number with exact configuration of each available system)
- Computer-student ratio
- Stand alone facility
- LAN facility
- Wi-Fi facility
- Licensed software
- Number of nodes/ computers with Internet facility
- Any other

The institution has provided computers to all departments with internet connectivity. The details of computing facility available at the institution are tabulated as given below:

Number of computers	Total 81
Laptops	10
Computer student ratio	1:1 in I.T. & Bioinformatics dept. 1:2 in computer Dept. 1:14 for college.
Wi-fi facility	Yes, in computer department.
LAN facility	In computer, I.T., Bioinformatics departments, Administrative office, and in library.
Licensed software	104 (eight different types)
Number of nodes/computers with internet connectivity	75
Stand alone facility	

**Details of the computer configurations: see Annexure-IV -ii**

**Licensed Software: 104**

The following table gives the list of licensed software purchased and available in college.

Sr.No.	Description	Code	Quantity
1	Microsoft window 2008 SVR CAL MOLP AE. DVC CAL.	SWMS337	25
2	MS WIN 2008 SVR STD MOLP AE.	SWMS337	01
3	MS Visual STUD 2008 PROF MOLP. AE	SWMS 279	25
4	MS Office 2007 STD MOLP AE.	SWMS 091	25
5	MS Window RMT DEKTP SVR CAL2008 MOLP.	SWMS435	25
6	MS WIN.2008 SVR MEDIA.	SWMS348	01
7	MS V STUD 2008 MEDIA.	SWMS309	01
8	MS OFF.2007 STD MEDIA.	SWMS 117	01
		Total	104

#### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- ❖ The Computer Science, Information Technology & Bio-Informatics departments have appropriate number of computers to perform their practical.
- ❖ In addition internet facility is available in all departments.
- ❖ Some departments have laptops & LCD projectors that are regularly used by the faculty for presentations during their lectures & also the students during their seminars/Project presentations.
- ❖ There are in all 10 laptops available in various departments of institution.
- ❖ Six computers are separately provided in the library through Network Resource Centre for use by students only. And all of them are in LAN network and have internet facility.
- ❖ As the college is a member of INFLIBNET, N-LIST Programme, faculty can use the resources available there in and outside the campus.

#### 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

The software's are upgraded according to change in the syllabus and

curriculum apart from the departments like Computer Science & Information Technology the college has deployed IT in other sections whenever possible like in Administrative office, library, Chemistry department, Microbiology Department, electronics lab, maths department ,in auditorium etc. to make functioning of various activities in these department more efficient. The examples are ...

- Connecting computers from some departments and the office to LAN and the internet.
- Establishment of well equipped Network Resource centre in the Library.
- The internet connectivity is upgraded by addition of four BSNL Broadband NMEICT connections of 1 MBPs each.
- Internet Speed is enhanced by bundling 6 NMEICT BSNL Broadband connections to 3 MBPS single connection.
- LCD projectors & computers are provided in each department.
- Making the Wi-Fi facility available in the college campus.
- Covering the entire campus under CCTV vigilance.
- 21 Old computers (Pentium) with CRT monitors in Computer Science laboratory are replaced by new DELL computers with Intel i5 and i3 CPU and LED monitors.
- Renewal of existing software's as per the need.
- Plan to have user smart classes.

4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Budgetary provisions made for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institute during last 4 years.

YEAR	AMOUNT IN RS.
2010 - 2011	1,69,237/-
2011 - 2012	15,175/-
2012 - 2013	9,735/-
2013 - 2014	70,090/-

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

- By providing the required infrastructure for the ICT based teaching, learning activities.
- By organizing training programs to staff and students in basic knowledge in computer, ms – Office, power point presentation handling and use of devices such as scanner, printer, and LCD/DLP projector.
- By providing internet browsing facility, preparation of teaching/learning materials.
- Multipurpose Auditorium Hall is well equipped by audio visual internet facility.

In last four years the college has enriched its departments with sufficient infrastructure like LCD/DLP projectors, Over Head Projector, Digital Camera, LED TV and the internet facility with 3 Mbps speed.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

- Almost all departments of the college deploy ICT in various ways making the classes' student – centered.
- Many lectures/seminars by students are conducted with the help of LCD/DLP projector.
- OHP/PPT presentations are the common & regular activities of all the departments that make Teaching-learning process interesting, effective, and student centered.
- Online video lectures are arranged for students in microbiology and computer department.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

Yes, the institution has NMICT internet connections. The college also



avails National Knowledge Network connectivity directly in the form of INFLIBNET. One of the services provided by this facility is NLIST which provides online access to various e-journals and e-books.

#### 4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

The institution ensures optimal allocation and utilization of the available financial resources for maintenance and upkeep of the facilities as given in following table.

Sr. no.	Head	Amount utilized in last four years in Rupees			
		2010 – 2011	2011 – 2012	2012 – 2013	2013 - 2014
a.	Building	83,250/-	11,14,386/-	35,56,758/-	1,22,49,990/-
b.	Furniture	94,786/-	44,412/-	88,529/-	12,66,339/-
c.	Equipment	69086/-	90,713/-	139236/-	-
d.	Computers	90847/-	8725/-	6805/-	70090/-
e.	Any other (electric goods & repairs)	54287/-	67329/-	77512/-	814224/-

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the College?

- For the maintenance and upkeep of the infrastructure facilities and equipments of the college, budgetary provisions are made in the Local Management Committee.
- The management has appointed architect shri. **Atul Bang** to ensure the upkeep and maintenance of all infrastructure facilities like building, classrooms, furniture etc.
- **Mr. Bablu Nare** is deployed as electrician for maintenance of electrical equipments, wiring and faults finding and repair.

- The maintenance of computer accessories is taken by **Mr. Uday Shah** of Siddharth Computers, Akola.
- Machineries and equipments are maintained by hiring services of experts from respective fields while minor repairs are carried out internally based on requisition by concerned head of department
- LCD projectors and microscopes are maintained by **Mr. Amit Kolhatkar** of Digitech systems ,Akola

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Calibration of measuring instruments and equipments in various laboratories is performed periodically as per the prescription of the manufacturer. In the beginning of the academic year each department carries out the calibration and precision measures for the equipments depending on the requirement.

**4.4.4** What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include  
Following steps have been taken for location, upkeep and maintenance of sensitive equipments.

- The institution has 10 KVA Generator. It is connected to all Laboratories, library, office and all classrooms.
- 7.5 KVA online UPS has been provided to Computers in Computer Science & I.T. Laboratory
- Each department has Inverter facility in case of Power failure.
- Constant water supply is maintained through bore well and two municipal water connections, water tanks and overhead water tanks in college premises. There are in all **17** water tanks and one underground water tank.
- For the Chemistry, Microbiology experiments, LPG gas is used for heating. In these departments secured and safe gas pipeline is installed by expert technicians. Safety valves are fixed at each working table. Gas cylinders are kept outside the laboratories in chambers.
- All departments and library are equipped with fire extinguishers.

**The augmentation in the infrastructure facilities in the institute after**

**second accreditation cycle may be summed up as follows.**

<b>Facility</b>	<b>At 2<sup>nd</sup> cycle</b>	<b>At 3<sup>rd</sup> cycle</b>
Total Constructed Area	4251.12Sq.m	5942.11 Sq.m
Class Rooms	17	21
Laboratories	11	19
Women Hostel with intake capacity	-	01 (24)
Computers	40	81
Laptops	-	10
Internet Points for student & staff	20	51
Internet connections	01 (dial Up)& 01 BB	7 (total 17 connections + 1 high speed 3 MBPS )
LCD Projectors	02	10
C.C.TV. Camera	-	16
Digital camera	02	10
UPS	01(3.5KVA)	01 (7.5 KVA)
INVERTERS	04	09
Central Power Generator	-	01(10KVA)
Gym Rooms	-	02
Boxing Ring	-	01
Lunch Shade for 50 students	-	01
New Courses Introduced	-	04 (2 UG + 2 PG)
Journals	8	14
e-books (N-LIST)	-	93809
e-Journals(N-LIST)	-	4137
N.R.C.	-	01
Biometry	-	01

Library area.      21.24 Sq.m.      268 Sq.m.

## **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

### **5.1 Student Mentoring and Support**

#### **5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

The institution publishes revised prospectus with latest information every academic year. The prospectus provides all the necessary information to help the students at the time of admission easily. The college prospectus contains the following information.

1. History of College with Vision & Mission
2. Rules & regulation
3. Enrolment
4. Identity card
5. Scholarship & Concession
6. Women's Hostel Facility
7. National Service Scheme(N.S.S)
8. National Cadet Corps (N.C.C.)
9. Game & Sports
10. College Examination
11. A.T.K.T. concessions at the time of Admission
12. University Rules Regarding Exemption
13. General Rules
  - i) Discipline
  - ii) Dress Code
  - iii) Library
  - iv) Co-operative Store
14. College's Prizes to the Meritorious Students.
15. Courses for U.G. & P.G. Students

16. Fee schedule
17. Information of various Scholarships/ Concessions
18. Important Events
19. Terms & Vacations
20. Last Year Achievements in all fields.
21. List of Executive Committee Members, Teaching Staff, Non-Teaching Staff and Office staff.
22. Information of courses conducted by the other colleges/ schools of the society.
23. Photographs of R.L.T.- Pride
24. List of L.M.C. Members
25. College's Full Name, Address, Contact No's, Email, Website.

Institute follows the above terms, conditions, rules & regulations, administrative process & providing maximum facilities mentioned in prospectus for the betterment of the students.

**5.1.2 Specify the type, number & amount of institutional Scholarship /free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

College has availed largest number of Scholarships & concessions during the last four years. Apart from the Govt. scholarships, there are several financial incentives given by the Principal such as fee concessions, fees deposit in installments and financial assistance to students on the basis of need & requirement. The details of the scholarships /free ships disbursed during the last four years are as under:

<b>Session</b>	<b>Government Sponsored Scholarships</b>	<b>Year wise</b>
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### 5.1.2 Scholarships

Session	Government Sponsored Concession				Year wise Beneficiaries	
	Sr.No.	Type of Scholarships	No. of Beneficiaries	Amount	No. of Students	Total Amount
2010-2011	1	Govt. of India Scholarship(SC/ST/VJ/NT/SBC/OBC)	213	489900	215	494500
	2	Post Metric Scholarship to Minority Society Students	02	4600		
2011-2012	1	Govt. of India Scholarship(SC/ST/VJ/NT/SBC/OBC)	243	558900	245	563500
	2	Post Metric Scholarship to Minority Society Students	02	4600		
2012-2013	1	Govt. of India Scholarship(SC/ST/VJ/NT/SBC/OBC)	268	616400	276	634800
	2	Post Metric Scholarship to Minority Society Students	08	18400		
2013-2014	1	Govt. of India Scholarship(SC/ST/VJ/NT/SBC/OBC)	373	857900	388	892400
	2	Post Metric Scholarship to Minority Society Students	15	34500		
<b>Total</b>			1124	2585200	<b>1124</b>	<b>2585200</b>

### 5.1.2 Concession



	<b>Sr. No.</b>	<b>Type of Concession</b>	<b>No. of Beneficiaries</b>	<b>Amount</b>	<b>No. of Students</b>	<b>Total Amount</b>
<b>2010-2011</b>	1	Economically Backward Class Concession	60	8700	<b>120</b>	<b>131620</b>
	2	Free Ship Concession to the Backward Student ( SC/ST/VJ/NT/SBC/OBC)	43	98900		
	3	Concession to the children of primary/secondary teachers	17	24020		
<b>2011-2012</b>	1	Economically Backward Class Concession	54	7830	<b>136</b>	<b>173790</b>
	2	Education Concession to the Children o Ex-service Man	55	126500		
	3	Free Ship Concession to the Backward Student ( SC/ST/VJ/NT/SBC/OBC)	27	39460		
<b>2011-2012</b>	1	Economically Backward Class Concession	81	11745	<b>170</b>	<b>193750</b>
	2	Free Ship Concession to the Backward Student ( SC/ST/VJ/NT/SBC/OBC)	57	131100		
	3	Concession to the children of primary/secondary teachers	32	50905		
<b>2012-2013</b>	1	Economically Backward Class Concession	85	12325	<b>180</b>	<b>223011</b>
	2	Education Concession to the Children o Ex-service Man	64	147200		
	3	Free Ship Concession to the Backward Student	31	63486		

		( SC/ST/VJ/NT/SBC/OBC)				
<b>Total</b>			606	722171	<b>606</b>	<b>722171</b>

**5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?**

Total No. of Students in Last Four Years

1124 (Scholarships) + 606 (Concessions) 1730

Total Students admitted in Last Four Years 3208

**53.92 %** of the students have received Central Government & State Government scholarships or concessions. The details are shown above in Year wise % with sources or agencies in table 5.1.2

**5.1.4 What are the specific support services/facilities available for?**

**i) Students from SC/ST, OBC and economically weaker sections**

1. Equal opportunity centre in college
2. Remedial coaching for SC/ST/OBC (excluding creamy layer) & Minorities (224 No. of Student Beneficiaries)
3. Coaching for NET/SET for SC/ST/OBC (excluding creamy layer) & Minorities (Mathematics) (82 No. of Student Beneficiaries)
4. Coaching Class for entry in services for SC/ST/OBC (non creamy layer) and Minorities. (216 No. of Student Beneficiaries)
5. Government of India Scholarship (GOI)
6. College provides official documents for getting Railway & Bus concessions.
7. Stipend for SC/ST/OBC through college with relatively high proportion of SC/ST/OBC (28 No. of Student Beneficiaries)
8. Economic Backward Concession/ Primary Teacher Concession
9. Reservation in admission as per government rules.

**ii) Students with physical disabilities**

1. Availability of Wheel Chair for physically disabled students.
2. Special attention on disabled students while teaching.
3. 1% reservation for physically handicapped students

4. Ramp and railing arrangement

**iii) Overseas students**

No overseas student is enrolled till date.

**v) Students to participate in various competitions/National & International**

<b>Achievements</b>	<b>2014-15</b>	<b>2010-11 to 2013-14</b>
No. of students visited Singapore and Malaysia under youth exchange programme(YEP) of NCC for <b>International Level</b>	<b>0</b>	<b>2</b>
No. of students selected for national level <b>research festival – Anvention</b>	2	0
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students participated in state level research festival – Avishkar	5	6
No. of students participated in university level research festival – Avishkar	6	11
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students of Games and Sports or Youth Festival and participated in West/ Centrals Zone and AIU national events	5	20
No. of medals/prizes achieved by the students in university level games and sports events	9	34
No. of students participated in state/national level quizzes, aptitude tests, paper/poster presentations	<b>0</b>	<b>22</b>
No. of prizes achieved by the students in university level seminars, quizzes, paper/poster presentations	<b>3</b>	<b>28</b>
No. of students of NCC and NSS participated in state, national and international events	0	11
No. of students selected as the member of student representative council (SRC) of Sant Gadge Baba Amravati University, Amravati.	1	2
No. of prizes achieved by the students in intercollegiate elocution, debate and essay competitions	<b>5</b>	<b>18</b>
No. of state/national level awards/fellowships received by the students	<b>0</b>	<b>3</b>

Sr.	Session	Name of Student	Class	Level	
1	2014-15	Ms.Priti Sharma	Research Scholar	Research Festival Inter Univ., Nagpur <b>Selected for “Anvention”</b>	
2		Mr. Sandip Toshniwal	M.Sc.II	Research Festival Inter Univ., Nagpur <b>Selected for “Anvention”</b>	
No. of students achieved prizes in science project competition - Science Pundit				<b>0</b>	<b>2</b>
No. of students selected for inspire scholarship of Rs. 4,00,000/- of Govt. of India				<b>0</b>	<b>5</b>
No. of students achieved prizes in sugam sangeet competitions				<b>0</b>	<b>2</b>

#### **National Cadet Corps Achievements- International Level**

Sr.	Session	Name of Student	Event	Level
1	2011-12	Mr. Anshu Jagmohan B.Sc.I	Youth Exchange Programme	<b>International Nepal</b>
2	2013-14	Mr. Mohindar Arora B.Sc.II	Youth Exchange Programme	<b>International Singapore &amp; Malaysia</b>

#### **Students selected for National Level Research Festival**

#### **Sports & Youth Festival Colour Coat Holder of University**

Sr.	Session	Name of Student	Event	Level
<b>1</b>	2010-11	Ms. Dhananshri Sone	Wrestling	National(AIU)
<b>2</b>		Ms. Dhananshri Sone	Judo	National(AIU)
<b>3</b>		Ms. Ankita Pimple Indradhanushya Medal	Fine Art (Y.F.)	National (West Zone AIU)
<b>4</b>	2011-12	Ms. Kalyani Moharil	Table Tennis	West Zone (AIU)
<b>5</b>		Ms. Durga Dandale	Wrestling	National(AIU)
<b>6</b>	2012-13	Ms. Dhananshri Sone	Wrestling	National(AIU)
<b>7</b>		Ms. Dhananshri Sone	Boxing	National(AIU)
<b>8</b>		Ms. Prachi Tathurkar	Badminton	West Zone (AIU)
<b>9</b>		Ms. Bhavana Sadar	Boxing	National(AIU)
<b>10</b>		Ms. Urja Shah	Boxing	National(AIU)
<b>11</b>		Ms. Kalyani Mohril	Table Tennis	West Zone (AIU)

<b>12</b>		Ms. Mahima Thakur	Table Tennis	West Zone (AIU)
<b>13</b>		Ms. Deepika Sonar	Hockey	West Zone (AIU)
<b>14</b>	2013-14	Ms. Dhananshri Sone	Judo	National(AIU)
<b>15</b>		Ms. Dhananshri Sone	Judo (Open)	National(AIU)
<b>16</b>		Ms. Prachi Tathurkar <b>University Team Captain</b>	Badminton	National (AIU) <b>Winner of Central Zone</b>
<b>17</b>		Ms. Kalyani Mohril	Table Tennis	National (AIU) <b>Winner of Central Zone</b>
<b>18</b>		Ms. Devyani Vyahare	Table Tennis	National (AIU) <b>Winner of Central Zone</b>
<b>19</b>		Ms. Deepika Sonar	Hockey	Central Zone (AIU)
<b>20</b>		Ms. Rashmi Mandurkar	Softball	National(AIU)
<b>21</b>		2014-15	Ms. Devyani Vyawahare Univ.team not participated	Table Tennis
<b>22</b>	Ms. Shubhangi Laghe		Wrestling	National(AIU)
<b>23</b>	Ms. Shubhangi Laghe		Judo	National(AIU)
<b>24</b>	Ms. Kiran Bajar		Boxing	National(AIU)
<b>25</b>	Ms. Harsha Agrawal		Boxing	National(AIU)J

#### **Avishkar Colour Coat Holder of University**

<b>Sr.</b>	<b>Session</b>	<b>Name of Student</b>	<b>Class</b>	<b>Level</b>
1	2010-11	Mr.Abhineet Sharma	B.Sc.III	Research Festival Inter Univ., Nashik
2		Ms. Sulbha Kulkarni	B.Sc.III	Research Festival Inter Univ., Nashik
3	2012-13	Ms. Gauree Wathodkar	B.Sc.I	Research Festival Inter Univ., Dapoli
4	2013-14	Ms. Resika Udapur	B.Sc.III	Research Festival Inter Univ., Jalgaon
5		Ms. Ankita Sharma	B.Sc.III	Research Festival Inter Univ., Jalgaon
6		Mr. Akshay Shriwas	B.Sc.III	Research Festival Inter Univ., Jalgaon
7	2014-15	Ms. Priti Sharma	Research Scholar	Research Festival Inter Univ., Nagpur
8		Mr. Sandip Toshniwal	M.Sc.II	Research Festival

				Inter Univ., Nagpur
9		Ms. Roshani Mulani	M.Sc.II	Research Festival Inter Univ., Nagpur
10		Ms. Manju Paryani	M.Sc. I	Research Festival Inter Univ., Nagpur
11		Ms. Sonia Nagre	B.Sc.III	Research Festival Inter Univ., Nagpur

### National Cadet Corps Achievements

Sr.	Session	Name of Student	Event	Level
1	2010-11	Ms. Vishakha Kokate B.Sc.I	NCC Parade	Republic Day, New Delhi
2		Mr. Anshu Jagmohan XII	NCC Parade	Republic Day, New Delhi
3	2012-13	Mr. Mohindar Arora B.Sc.I	NCC Parade	Republic Day, New Delhi
4		Mr. Akshay Shriwas B.Sc.II	Mah. Thal Sainik Camp	New Delhi
5		Mr. Mohindar Arora B.Sc.I	National Integration camp	Meerut (U.P.)
6		Mr. Sachin Rathod B.Sc. III	Special National Integration camp	Jaisalmer (Raj.)
7		Ms. Pritee S. Pohekar B.Sc. II		
8	2014-15	Mr. Sahil Gokhale SD	NCC Parade	Republic Day, New Delhi

### National Service Scheme Achievements

	Session	Name of Student	Class	Level
1	2013-14	Ms. Urja Shah	B.Sc.III	Republic Day, New Delhi
2		Ms. Arti Dahibhate	B.Sc.III	National Integration camp, Assam
3		Mr. Amol Deshpande	B.Sc.III	State Level Republic Parade, Mumbai

Sr.	Session	Name of Student	Post Held
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1	2010-11	Mr. Gopal Nimkarde	U.R. of College & Member of University Council S.R.C. Body
2	2011-12	Mr. Tushar Ghope	U.R. of College
3	2012-13	Mr. Anshu Jagmohan	U.R. of College
4	2013-14	Ms. Prachi Tathurkar	U.R. of College & Member of University Council S.R.C. Body
5	2014-15	Mr. Mohindar Arora	U.R. of College & Member of University Council S.R.C. Body

**University Students Representative Council**

**Inspire Scholarship (for a period of five years)**

Sr.	Session	Name of Student	Amount
1	2011-12	Ms. Ankita Kabra	Rs. 4,00,000/-
2		Ms. Manju Pariyani	Rs. 4,00,000/-
3		Mr. Avinash Khanderao	Rs. 4,00,000/-
4	2012-13	Ms.Dnyaneshwar Thombare	Rs. 4,00,000/-
5		Ms. Farheen Maniyar	Rs. 4,00,000/-

**Indian Student Parliament**

Sr.	Session	Name of Student	Class	Level
1	2014-15	Mr. Akshay Rathod	B.Sc.II	5 <sup>th</sup> Indian Student Parliament Jan. 2015

**Extra- Curricular Activity & Other Competition's Achievements**

**Session: 2014-15**

1. **Ms. Shraddha Maheshwari** (M.Sc.-II, Microbiology) has been



selected for university level research festival "Avishkar".

2. **Ms. Devyani Vyahware** (B.Sc.-II), **Ms. Mahima Thakur** (B.Sc.III), **Ms. Suvarna Deokar** (M.Sc.II) & **Ms. Priya Pachori** (M.Sc.-II) were the members of table tennis championship runner team of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Shubhangi Laghe** (B.Sc.-II) has achieved bronze medal in "Vidarbha Kesari" tournament at Devali, Wardha.
4. **Ms. Chhaya Varte** (B.Sc.-II) has achieved bronze medal in "Vidarbha Kesari" wrestling tournament at Devali, Wardha.
5. **Mr. Ujjwal Deshmukh** (B.Sc.-II) has achieved bronze medal in intercollegiate taekwondo tournament of the Sant Gadge Baba Amravati University, Amravati.
6. **Ms. Bhagyashri Lakde** (B.Sc.-II) has achieved silver medal in intercollegiate boxing tournament of the Sant Gadge Baba Amravati University, Amravati.
7. **Mr. Shubham Choudhari** (B.Sc.-II) has achieved Silver medal in intercollegiate Judo tournament of the Sant Gadge Baba Amravati University, Amravati.
8. **Ms. Sanchi Gajghate** (B.Sc.-II) has achieved 2<sup>nd</sup> prize in university level intercollegiate seminar competition of AUCTA at Mungasaji Maharaj Mahavidyalaya, Darwha.
9. **Ms. Jagruti Sharma** (M.Sc.-II, Mathematics) has achieved 3<sup>rd</sup> prize in university level intercollegiate seminar competition in mathematics at Sant Gadge Baba Amravati University, Amravati.
10. **Mr. Digvijay Borde** and **Ms. Kiran Bajar** (B.Sc.-II) have achieved 2<sup>nd</sup> prize in intercollegiate poster presentation competition organized by Forest Department on occasion of "World Wetland Day" celebration at Shri Shivaji Arts Commerce and Science College, Akola.
11. **Ms. Ankita Sharma** and **Ms. Rasika Udupure** (M.Sc.-I, Microbiology) have achieved consolation prize in state level quiz competition organized on occasion of "World Wetland Day" at Dr. Ambedkar Mahavidyalaya, Nagpur.
12. **Ms. Ankita Fursule** (B.Sc.-III) has achieved 1<sup>st</sup> prize in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society Akola.
13. **Ms. Neha Tiwari** (B.Sc.-III) has achieved 2<sup>nd</sup> prize in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society Akola. She has achieved consolation prize in intercollegiate elocution competition "Spandan" at Shankarlal Khandelwal College, Akola.
14. **Ms. Varsha Yennewar** (B.Sc.-II) has achieved 1<sup>st</sup> prize and trophy in intercollegiate elocution competition at Babuji Deshmukh Library, Akola.

15. **Mr. Mayur Mahalle** (B.Sc.-III) has achieved 1<sup>st</sup> prize in essay competition at District Collector Office, Akola.

**Session: 2013-14**

1. **Ms. Ankita Kabra** (B.Sc.-III) has secured 4<sup>th</sup> position in the merit list of B.Sc., Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
2. **Ms. Bhuvaneshwari Wankhade** (B.Sc.-III) has secured 9<sup>th</sup> position in the merit list of B.Sc., Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Pooja Balode** (M.Sc.-II, Microbiology) has secured 2<sup>nd</sup> position in the merit list of M.Sc.-Microbiology, Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
4. **Ms. Deeptishree Yadav** (M.Sc.-II, Microbiology) has secured 3<sup>rd</sup> position in the merit list of M.Sc.-Microbiology, Summer-2014 examination of the Sant Gadge Baba Amravati University, Amravati.
5. **Ms. Kalyani Moharil** (B.Sc.-III) was the member of gold medal winner table tennis team of central zone inter-university tournament.
6. **Ms. Deepika Sonar** (B.Sc.-III) has been awarded Maharashtra Yuva Ratna Award of Delhi University and honoured with Manavseva Yuva Ratna Award by Sahitya Academy, Anjangaon, Maharashtra. She has been selected for university level research festival "Avishkar".
7. **Ms. Devyani Vyawahare** (B.Sc.-I) was the member of gold medal winner table tennis team of central zone inter-university tournament.
8. **Ms. Prachi Tathurkar** (M.Sc.-II, Microbiology) has been awarded with colour coat in badminton and she represented the Sant Gadge Baba Amravati University, Amravati in central zone inter-university tournament and all India inter-university tournament at Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar. **She was the captain of university team.** She was the member of student representative council (SRC) of Sant Gadge Baba Amravati University, Amravati.
9. **Ms. Dhanashri Sone** (M.Sc.-II, Microbiology) has achieved cash prize of Rs. 30,000/- in Late Khashaba Jadhav state level wrestling tournament at Jalna and she participated in "Maharashtra Kesari" women tournament at Pune.
10. **Ms. Shubhangi Laghe** (B.Sc.-I) has participated in Late Khashaba Jadhav state level wrestling tournament at Jalna and in "Maharashtra Kesari" women tournament at Pune.
11. **Mr. Anshu Jagmohan** (B.Sc.-III) has achieved gold medal in intercollegiate chess tournament of the Sant Gadge Baba Amravati University, Amravati.
12. **Ms. Sonali Karule** (B.Sc.-II) has achieved silver medal in intercollegiate judo and boxing tournament and bronze medal in

- wrestling tournament of the Sant Gadge Baba Amravati University, Amravati.
13. **Mr. Mohindar Arora** (B.Sc.-II) has visited Singapore and Malaysia under youth exchange programme (YEP) of NCC sponsored by Bajaj group of company and represented the college through NCC in national integration camp held at Meerat, UP. He has achieved 1<sup>st</sup> prize in university level seminar competition at Shri Shivaji Arts, Commerce and Science College, Akola.
  14. **Ms. Kalpana Palaspagar** (Ph.D. Scholar, Chemistry) has been selected for Rajiv Gandhi national fellowship of UGC, Rs. 16,000/- per month.
  15. **Ms. Manju Pariyani** (B.Sc.-III) has achieved 1<sup>st</sup> prize in state level seminar competition on "Water management" at Shri Shivaji Arts, Commerce and Science College, Akola.
  16. **Ms. Ritika Bhalerao** (B.Sc.-II) has achieved 2<sup>nd</sup> prize in university level intercollegiate seminar competition in chemistry at Shri Shivaji Science College, Amravati.
  17. **Ms. Abhilasha Deshmukh, Ms. Maithili Deshmukh, Ms. Priya Ingle** (B.Sc.- III) and **Ms. Ashwini Huse, Ms. Devyani Shelke, Ms. Diksha Choube** (B.Sc.-II) have secured 2<sup>nd</sup> position in 13<sup>th</sup> state level "Microbiological Quiz Competition" at R.C.Patel College, Shirpur (Dhule). **Ms. Abhilasha Deshmukh** achieved award of Excellency.
  18. **Mr. Mandar Navghare** (B.Sc.-III) has achieved 1<sup>st</sup> prize in science project competition and exhibition "Science-Pundit" organized jointly by the college and Lokmat Yuva-NXT.
  19. **Ms. Ankita Fursule** (B.Sc.-II) has achieved 2<sup>nd</sup> prize in intercollegiate elocution competition at Govt. B.Ed. College, Akola. She has also bagged 2<sup>nd</sup> prize in elocution competition on "Participation of youth in politics" at Sports Office, Akola.
  20. **Ms. Ravina Mirge** (B.Sc.-III) has achieved 1<sup>st</sup> prize in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society, Akola.
  21. **Ms. Neha Tiwari** (B.Sc.-II) has achieved consolation prize in intercollegiate elocution competition "Spandan" at Shankarlal Khandelwal College, Akola.
  22. **Mr. Kiran Nanote** (B.Sc.-II) has achieved 3<sup>rd</sup> prize in intercollegiate "Sugam sangeet" competition at Smt. L.R.T. Commerce College, Akola.

#### **Session: 2012-13**

1. **Ms. Roshani Mulani** (B.Sc.-III) has secured 2<sup>nd</sup> position in the merit list of B.Sc., Summer-2013 examination of the Sant Gadge Baba Amravati University, Amravati. She achieved gold medal for 1<sup>st</sup> merit in chemistry, one silver medal for 2<sup>nd</sup> merit amongst all students and two silver medals for 1<sup>st</sup> merit amongst girl students.

2. **Mr. Tushar Ghope** (B.Sc.-III) has secured **4<sup>th</sup> position in the merit list of B.Sc., Summer-2013 examination** of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Vandana Deshmukh** (M.Sc.-II, Chemistry) has secured **8<sup>th</sup> position in the merit list of M.Sc.-Chemistry, Summer-2013 examination** of the Sant Gadge Baba Amravati University, Amravati.
4. **Ms. Gauree Wathodkar** (B.Sc.-I) has achieved 1<sup>st</sup> prize of Rs. 3000/- in national level technical festival "Horizon-2013" at Sanmati Engineering College, Washim and 3<sup>rd</sup> prize in state level "Chemistry Talent Search Examination" organized by Moolji Jaitha College, Jalgaon. She has been awarded with 1<sup>st</sup> prize in science project competition and exhibition "Science-Pundit" organized jointly by the college and Lokmat Yuva-NXT and 1<sup>st</sup> prize in national level paper presentation competition "Techno Manthan" at Dhamangaon Education Society's College of Engineering and technology in association with ISTE, New Delhi and IJSER. She has secured 1<sup>st</sup> position in intercollegiate seminar competition on "Environmental Awareness" at our college and secured 2<sup>nd</sup> position in university level seminar competition in mathematics at Shri Shivaji College, Chikhali.
5. **Ms. Dhanashri Sone** (M.Sc.-I, Microbiology) has achieved bronze medals in intercollegiate judo tournament of the Sant Gadge Baba Amravati University, Amravati and open state senior judo tournament.
6. **Ms. Kalyani Mohril (B.Sc.-II), Ms. Mahima Thakur (B.Sc.-I) Ms. Suvarna Deokar and Ms. Priya Pachori** (B.Sc.-III) were the members of Table Tennis championship winner team of the Sant Gadge Baba Amravati University, Amravati.
7. **Ms. Deepika Sonar** (B.Sc.-II) has achieved 3<sup>rd</sup> prize of Rs. 1000/- in university level poster competition at K. N. College, Karanja (Lad) and also bagged 3<sup>rd</sup> Prize in intercollegiate elocution competition at Babuji Deshmukh Library, Akola.
8. **Ms. Sonali Karule** (B.Sc.-I) has achieved silver medal in intercollegiate boxing tournament of the Sant Gadge Baba Amravati University, Amravati and bronze medal in open boxing tournament.
9. **Ms. Sachin Kshirsagar** (B.Sc.-II) has achieved bronze medal in intercollegiate boxing tournament of the Sant Gadge Baba Amravati University, Amravati.
10. **Mr. Tushar Ghope** (B.Sc.-III) has secured 1<sup>st</sup> position in seminar competition organized by ISCA, Amravati at Sant Gadge Baba Amravati University, Amravati. He has achieved 3<sup>rd</sup> prize in university level intercollegiate seminar Competition of AUCTA at R. A. College, Washim and secured 1<sup>st</sup> rank in debate competition on "Genetically modified crops and food security" at Shri Shivaji Arts, Commerce and Science College, Akola.

11. **Ms. Manju Pariyani** (B.Sc.-II) has achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition in chemistry at Dr. R. G. Rathod Arts and Science College, Murtizapur and secured 1<sup>st</sup> rank in science day poster competition at Shri Shivaji Arts, Commerce and Science College, Akola. She has achieved 2<sup>nd</sup> prize and trophy in intercollegiate poster competition at Shri Shivaji Arts, Commerce and Science College, Akola.
12. **Mr. Dnyaneshwar Thombare** and **Ms. Farheen Maniyar** (B.Sc.-I) have achieved 1<sup>st</sup> prize in university level intercollegiate "Chemistry-Quiz" competition of AUCTA at Govt. Vidarbha Institute of Science and Humanities, Amravati.
13. **Ms. Abhilasha Deshmukh**, **Ms. Rasika Udupure** and **Ms. Ankita Sharma** (B.Sc.-III) have secured 3<sup>rd</sup> position in 12<sup>th</sup> state level "Microbiological Quiz Competition" at R.C. Patel College, Shirpur, Dhule.
14. **Ms. Ravina Mirge** (B.Sc.-II) has achieved 2<sup>nd</sup> prize and trophy in university level intercollegiate elocution competition at Govt. B.Ed. College, Akola and secured 3<sup>rd</sup> position in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society, Akola.
15. **Ms. Farheen Maniyar** and **Mr. Dnyaneshwar Thombare** (B.Sc.-I) have been selected for inspire scholarship of Rs. 4,00,000/- each of Govt. of India.
16. **Ms. Neha Tiwari** (B.Sc.-I) has achieved 1<sup>st</sup> prize and trophy in intercollegiate elocution competition at Babuji Deshmukh Library, Akola and she secured 1<sup>st</sup> position in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society Akola.
17. **Ms. Ankita Fursule** (B.Sc.-I) has achieved 1<sup>st</sup> prize and trophy and **Mr. Rahul Sarse** (B.Sc.-I) has achieved 2<sup>st</sup> prize and trophy in intercollegiate elocution competition at Babuji Deshmukh library, Akola.
18. **Ms. Vaishnavi Borkar** (B.Sc.-II) has secured 2<sup>nd</sup> rank in essay competition at Shri Shivaji Arts, Commerce and Science College, Akola.

#### **Session: 2011-12**

1. **Ms. Kalyani Moharil** (B.Sc.-I), **Ms. Suvarna Deokar**, **Ms. Priya Pachori** (B.Sc.-II), **Ms. Pooja Khedkar** & **Ms. Poonam Wankhade** (M.Sc.-I, Chemistry) women team of table tennis has secured 1<sup>st</sup> position in Sant Gadge Baba Amravati University, Amravati.
2. **Ms. Durga Dandale** (B.Sc.-III) has secured 3<sup>rd</sup> position in intercollegiate judo tournament of the Sant Gadge Baba Amravati University, Amravati.
3. **Ms. Deepika Sonar** (B.Sc.-I) has been selected as a standby player in hockey team of Sant Gadge Baba Amravati University, Amravati.

4. **Mr. Vaibhav Kasture** (B.Sc.-I) has achieved silver medal in intercollegiate Boxing tournament of the Sant Gadge Baba Amravati University, Amravati.
5. **Mr. Sachin Kshirsagar** (B.Sc.-I) has secured 3<sup>rd</sup> position in intercollegiate Boxing tournament of the Sant Gadge Baba Amravati University, Amravati.
6. **Ms. Bhavana Sadar** (B.Sc.-II) has secured 3<sup>rd</sup> position in intercollegiate judo tournament of the Sant Gadge Baba Amravati University, Amravati.
7. **Ms. Sayali Nale** (B.Sc.-I) has achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition in chemistry at Dr. R. G. Rathod Arts and Science College, Murtizapur.
8. **Mr. Tushar Ghope** (B.Sc.-I) has secured 1<sup>st</sup> rank in concept test in chemistry of Indian association of chemistry teachers on the eve of international year of chemistry. He has been awarded with 1<sup>st</sup> prize in intercollegiate seminar competition in botany at Phulsing Naik Mahavidyalaya, Pusad and 2<sup>nd</sup> prize in intercollegiate seminar competition in chemistry at Shri Shivaji Science College, Amravati.
9. **Ms. Vinita Jha** (B.Sc.-II) has achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition of AUCTA at Shri Shivaji Arts, Commerce and Science College, Akola.
  
10. **Mr. Prathamesh Lajurkar** (B.Sc.-II) has secured 1<sup>st</sup> rank in General Knowledge Test Competition of Vidarbha Universities Physics Teachers Association and received 2<sup>nd</sup> prize in intercollegiate seminar competition in physics at J. B. Science College Wardha. He has been awarded with 1<sup>st</sup> prize in intercollegiate seminar competition in physics at J. D. Patil Sangludkar Mah. Daryapur.
11. **Ms. Pooja R. Khedkar** (M.Sc.-I) has achieved 2<sup>nd</sup> prize in university level intercollegiate seminar competition of AUCTA on "Green chemistry" at Shri R.L.T. College of Science, Akola on 28<sup>th</sup> Feb. 2012.
12. **Mr. Asif Saleh** (B.Sc.-III) has achieved 1<sup>st</sup> prize in university level Inter collegiate seminar competition in physics at S.S.S.K.R. Innani College, Karanja Lad and secured 2<sup>nd</sup> position in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society, Akola.
13. **Ms. Abhilasha Deshmukh** and **Ms. Trishila Adwani** (B.Sc.-I) have achieved 1<sup>st</sup> prize in university level intercollegiate "Chemistry-Quiz" competition of AUCTA at Vidyabharati Mahavidyalaya, Amravati.
14. **Ms. Manju Pariyani, Ms. Ankita Kabra** and **Ms. Trishila Adwani** (B.Sc.-I) have secured 2<sup>nd</sup> position in state level poster exhibition on "Biotechnology for better tomorrow" at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

15. **Ms. Abhilasha Deshmukh, Ms. Ankita Kabra and Ms. Ankita Sharma** (B.Sc.- I) have secured 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> position respectively in 11<sup>th</sup> state level "Microbiological Quiz Competition" at R. C. Patel College, Shirpur (Dhule).
16. **Ms. Ankita Kabra, Ms. Manju Pariyani & Mr. Avinash Khanderao** (B.Sc.-I) have been selected for INSIPIRE scholarship of Rs. 4,00,000/- each of Govt. of India.
17. **Ms. Pallavi Kasbe** (B.Sc.-III) has achieved 1<sup>st</sup> prize in Dr. Babasaheb Ambedkar philosophical thoughts competition at Smt. L. R. T. Commerce College, Akola.
18. **Ms. Ravina Mirge** (B.Sc.-I) has achieved 1<sup>st</sup> prize in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society, Akola and secured 3<sup>rd</sup> position in intercollegiate elocution competition at Shri Shivaji Arts, Commerce and Science College, Akola.

#### **Session: 2010-11**

1. **Ms. Shubhada Kulkarni** (B.Sc.-III) has achieved gold medal for 1<sup>st</sup> merit amongst students in **B.Sc., summer-2011 examination** of the Sant Gadge Baba Amravati University, Amravati. She has been selected for university level research festival "Avishkar".
2. **Ms. Sulbha Kulkarni** (B.Sc.-III) has achieved silver medal for 2<sup>nd</sup> merit amongst students in **B.Sc., summer-2011 examination** of the Sant Gadge Baba Amravati University, Amravati.
3. **Mr. Tushar Ghope** (B.Sc.-I), **Ms. Mayuri Wasu** (B.Sc.-II) and **Ms. Aboli Joshi** (B.Sc.-III) have been selected for university level research festival "Avishkar".
4. **Ms. Jaya Mishra** (B.Sc.-I) has secured 2<sup>nd</sup> position in intercollegiate wrestling and judo tournament of the Sant Gadge Baba Amravati University, Amravati.
6. **Ms. Rita Ratnaparkhi** (B.Sc.-II) has secured 3<sup>rd</sup> position in intercollegiate wrestling tournament of the Sant Gadge Baba Amravati University, Amravati.
7. **Mr. Prathamesh Lajurkar** (B.Sc.-I) has achieved 1<sup>st</sup> prize in essay competition organized by Mahatma Gandhi Study Centre and Canara Bank, Akola. He has been awarded with 1<sup>st</sup> prize in intercollegiate seminar competition in mathematics at Bhartiya Mahavidyalaya, Amravati.
8. **Ms. Faiza Sheikh and Mr. Tushar Ghope** (B.Sc.-I) have achieved 1<sup>st</sup> prize in university level intercollegiate "Chemistry-Quiz" competition of AUCTA at Shankarlal Khandelwal College, Akola.
9. **Ms. Khushboo Virwani** (B.Sc.-III) has achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition of AUCTA at R. D. I. K. & K. D. College, Badnera.

10. **Mr. Sharad Taware** (B.Sc.-II) has achieved 3<sup>rd</sup> prize in university level intercollegiate seminar competition of AUCTA at Smt. R. S. Arts, Commerce and Science College, Anjangaon Surji.
11. **Mr. Sunil Pawar** (M.Sc.-II, Mathematics) has achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition in mathematics at Sant Gadge Baba Amravati University, Amravati.
12. **Mr. Mangal Sonone** (M.Sc.-II, Mathematics) has achieved 2<sup>nd</sup> prize in university level intercollegiate seminar competition in mathematics at Sant Gadge Baba Amravati University, Amravati.
13. **Ms. Vaishali Suradkar** and **Ms. Sapna Gawhale** (B.Sc.-III) have achieved 1<sup>st</sup> prize in poster presentation competition in national conference on "Developing Frontiers of Physics, Astronomy and Space Sciences" at Shri R.L.T. College of Science, Akola.
14. **Ms. Pallavi Barad** (B.Sc.-III) has achieved 3<sup>rd</sup> prize in Shri Natwarlalji Chaudhary elocution competition organized by the B.G.E. Society, Akola.
15. **Ms. Durga Dandale** (B.Sc.-II) has achieved 2<sup>nd</sup> prize in intercollegiate "Sugam sangeet" competition.

**v) Medical assistance to students: health centre, health insurance etc.**

**A. Medical Checkup** in the month of December of every year. The following mentioned students took benefit of the camp is during last four years.

Session	Year wise Beneficiaries		
	Female	Male	Total
2010-2011	347	98	445
2011-2012	178	65	243



2012-2013	181	63	244
2013-2014	192	89	281
2014-2015	163	111	274
<b>Total</b>	<b>1061</b>	<b>426</b>	<b>1487</b>

**B. Blood Group Checking Camp** on 24<sup>th</sup> December every year. The following mentioned students took benefit of the camp is during last four years.

<b>Session</b>	<b>Year wise Beneficiaries</b>
2010-2011	105
2011-2012	120
2012-2013	71
2013-2014	94
2014-2015	182
<b>Total</b>	<b>572</b>

**C. Student Safety Insurance** as per University rules. Insurance fee collected by the students at the time of admission deposited to university as per the rules.

<b>Session</b>	<b>Registered Students Under Scheme</b>					<b>Total</b>
	<b>B.Sc.I</b>	<b>B.Sc.II</b>	<b>B.Sc.III</b>	<b>M.Sc.I</b>	<b>M.Sc.II</b>	
<b>2010-2011</b>	302	110	85	78	25	<b>600</b>
<b>2011-2012</b>	273	180	108	85	35	<b>681</b>
<b>2012-2013</b>	340	237	107	90	28	<b>802</b>
<b>2013-2014</b>	378	231	183	88	43	<b>923</b>
<b>2014-2015</b>	450	330	230	80	76	<b>1166</b>
<b>Total</b>	<b>1743</b>	<b>1088</b>	<b>713</b>	<b>421</b>	<b>207</b>	<b>4172</b>

**D. Physical Efficiency Test** is conducted in January of every year. The following mentioned students attended this test during last four years.

**Statement for Physical Efficiency Test (Five Years)**

<b>Session</b>	<b>Men</b>	<b>Women</b>	<b>Year Wise Total</b>
<b>2010-2011</b>	28	111	<b>139</b>
<b>2011-2012</b>	62	137	<b>199</b>

<b>2012-2013</b>	34	153	<b>187</b>
<b>2013-2014</b>	61	244	<b>305</b>
<b>2014-2015</b>	64	388	<b>452</b>
<b>Total</b>	<b>249</b>	<b>1033</b>	<b>1282</b>

**i) Organizing coaching classes for competitive exams**

- a) Coaching for NET/SET for SC/ST/OBC (excluding creamy layer) &

Minorities (Mathematics) Under Merged Scheme XI the Plan

This scheme started its coaching classes from 1.12.2010. No. of

Students benefitted from this scheme as follows.

<b>Session</b>	<b>S.C.</b>	<b>S.T.</b>	<b>O.B.C.</b>	<b>Minorities</b>	<b>Other</b>	<b>Total</b>
2010-11	06	01	13	05	08	33
2011-12	02	01	10	02	10	25
2012-13	04	00	14	03	03	24
<b>Total</b>	<b>12</b>	<b>02</b>	<b>37</b>	<b>10</b>	<b>21</b>	<b>82</b>

- b) Coaching Class for entry in services for SC/ST/OBC (Non creamy layer) and Minorities. This scheme started its coaching classes from 1.08.2010. No. of Students benefitted from this scheme as follows.

<b>Session</b>	<b>S.C.</b>	<b>S.T.</b>	<b>O.B.C.</b>	<b>Minorities</b>	<b>Other</b>	<b>Total</b>
2010-11	21	03	41	10	40	115
2011-12	24	05	53	05	14	101
<b>Total</b>	<b>45</b>	<b>08</b>	<b>94</b>	<b>15</b>	<b>54</b>	<b>216</b>

**vii) Skill development (computer literacy spoken English,, etc.,)**

- a) Spoken English Classes - Spoken English Classes conducted in regular Tutorial Class.
- b) Computer Literacy is developed through Computer Science Department.
- c) Online Spoken-Tutorial Workshop  
Department of Computer Science & I.T. organized online Spoken

Tutorial Workshop on dated 30/01/2015 through Video Conferencing (Virtual Class). **32 Students** received benefit from this class.

**viii) Support for “slow learners”**

Extra Classes conducted for slow learners.

Remedial coaching classes arranged under UGC Scheme.

**ix) Exposures of students to other institution of higher Learning / Corporate / Business house etc.**

All the departments conduct educational study tour to higher research institute and excursion tours. Industrial visits are also arranged in which students are interacting with industry experts. Departmental seminars, workshops of scientific aspects, Cultural fests on social aspects are organized with the help of University and other Institutions. Experts from reputed institutions share their knowledge and views with the students for future planning. i .e. Leben Pharmaceuticals Ltd., Parle Industries, Power Thermal Plant, I<sup>2</sup>IT Pune, Vitthal Mushroom Plant etc.

**x) Publication of student magazines.**

Yes, The College publishes the annual College Magazine “Pratibimb” in which Articles in English, Marathi and Hindi are contributed by the students & Staff. The entire activity of collecting the articles, puzzles, cartoons, editing, designing the cover page and publishing the magazine is done by the students with guidance of faculty members. College magazine committee holds the meeting to decide the theme of the annual magazine. Editorial Board comprising faculty members as well as students scrutinizes the articles received by the students and teachers before inclusion in college magazine.

Session	Committee Members		Theme	Theme in English
	Staff	Student		

<b>2010-2011</b>	07	06	Sudhrudh Bharat	Sound India
<b>2011-2012</b>	06	06	Vansampada	Forestreasure
<b>2012-2013</b>	07	04	Yuva	Youth Special
<b>2013-2014</b>	07	03	Paryavaran Rakshanacha Vaidnyanik Drushtikon	Scientific view of Protecting Environment
<b>2014-2015</b>				

**5.1.5 Describe the efforts made by the institution to facilitate Entrepreneurial skills, among the students and the impact of the efforts.**

The Institute takes efforts to develop entrepreneurial skills among the students as follows.

- UGC Sponsored add-on job oriented course in Clinical Laboratory Technology
- Industrial visit motivate the students to establish the low cost project like Bio Gas Plant.
- Industrial visit helps students to set up their mind in subject related businesses.
- “Sericulture, Training & Guidance” – a workshop conducted on 16<sup>th</sup> December 2010, attended by 400 Students & Farmers.
- A project cum scheme, named as “Earn & Learn” implemented by Department of Electronic to create minimum competency in students to get the source of livelihood.
- Alumni of the college, who are industrialist as well as business persons often guide our students to develop entrepreneurial skills.

**5.1.6 Enumerate the policies and strategies of the institution which promote Participation of students in extracurricular and co-curricular activities Such as sports, games, quiz competitions, debate and discussions, cultural Activities etc.**

**\* Additional academic support, flexibility in Examinations**

**\* Special dietary requirements, sports uniform and materials.**

**\* Any other**

The Institution is committed to attract students for participating in Extracurricular and co-curricular activities such as sports, games, quiz competitions, debate, discussions & cultural events. The college provides adequate funds and necessary facilities. The Department of Physical Education and cultural committees supervise the extracurricular activities.

- The College has Chess, Badminton, Table Tennis, Judo, Wrestling, Boxing, Athletics, Volleyball, Football & Basketball Teams. Many other players participate for Selection Trials individually in different sports events.
- The college selects interested students to participate in Youth Festival events like Music, Dance, Theater, Fine Art & Lit. Events. Youth Festival is organized by the university every year. Apart from this Annual Sports Day is celebrated in college.
- The students who participate in the Cultural Event, Sports, Event, NCC Event, NSS Event or other extracurricular activities are provided with extra classes so that the time they have spent for the various activities can be made-up, special re-tests are also arrange for them.
- Daily Allowance, Traveling Allowance, Lodging Allowance, Medical Expenses are provided to such a students with dietary requirements, Sports Kits with Sports Equipments.
- Management & College provides cash prize Rs. 1000 for colour holder's /certificates/ Mementos etc. to deserving Arts and sports persons to motivate them to achieve excellence in their area of interest.
- Dr. Babasaheb Ambedkar Jayanti Din organized every year on 14<sup>th</sup> April through which students pay homage to great leader by participating in "14

Tas Abhyas Vikasacha Dhyas” which inspire students for study up to 14 hours.

- Every year on 24<sup>th</sup> December College organizes felicitation programme for academic achievements of the students in which number of cash prizes awarded to the meritorious students.
- Every year on 26<sup>th</sup> January ‘Republic Day’ is celebrated as a Achievement Day in which academic success and students of higher position in research festival, sports, N.C.C., N.S.S, cultural, Extra co-curricular activities are felicitated.
- Every year College Library gives ‘Best Reader Award’ to students who is regular visitor of library
- Every Year College also gives ‘Best Student Award’ & Best Deserving Student Award to student’s academic excellence.
- ‘Best Volunteer Award’ given to a student who plays proactive in throughout the NSS activity.
- ‘Best Sportsman Award’ given to a player who gets highest achievement in games and sports.

#### **Best Reader Award from Library**

<b>Sr.</b>	<b>Session</b>	<b>Name of Student</b>	<b>Class</b>
1	2010-11	Mr. Mohd. Asif	B.Sc. III
2	2011-12	Ms. Sonali Manjare	B.Sc.II
3	2012-13	Mr. Vishal Ingle	B.Sc.III
4	2013-14	Ms. Trishila Advadi	B.Sc.II
5	2014-15	Mr. Ganesh Kolhe	M.Sc.II

<b>Sr.</b>	<b>Session</b>	<b>Best Deserving Student</b>	<b>Best Student</b>
1	2010-11	Ms.Dhanashri Sone	Ms. Sulbha Kulkarni
2	2011-12	Mr. Mohd. Asif	Mr. Tushar Ghope
3	2012-13	Ms. Darshana Pithadiya	Ms. Manju Pariyani
4	2013-14	Ms. Priya Sharma	Ms. Diksha Chaure
5	2014-15	Mr. Vishal Ingle	Mr. Swapnil Ingle.

#### **Best NSS Volunteer Award**

<b>Sr.</b>	<b>Session</b>	<b>Name of Student</b>	<b>Class</b>
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1	2010-11	Mr. Gopal Nimkarde	B.Sc. II
2		Ms. Mayuri Vasu	B.Sc.II
3	2011-12	Mr. Tushar Ghope	B.Sc.II
4		Ms. Sonali Manjare	B.Sc.II
5	2012-13	Mr. Ravindra Gote	B.Sc.III
6		Ms. Ravina Mirge	B.Sc.II
7	2013-14	Mr. Digvijay Borde	B.Sc.II
8		Ms. Deepika Sonar	B.Sc.III
9	2014-15	Mr. Swapnil Mesare	B.Sc.II
10		Ms. Ravina Rakhonde	B.Sc.II

**Best Sportsman Award**

<b>Sr.</b>	<b>Session</b>	<b>Name of Student</b>	<b>Class</b>
1	<b>2013-14</b>	Ms. Dhananshri Sone ( Six times Color Coat Holder in Wrestling, Judo & Boxing)	M.Sc. II (Micro.)
2		Ms. Kalyani Mohril ( Three times Color Coat Holder of Table Tennis)	B.Sc. III

**5.1.7 Enumerating on the support and guidance provided to the students in Preparing for the competitive exams, give details on the number of Students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.**

The college supports and provides guidance to the student in preparing for various competitive exams, central/state services, NET/SET/GATE and for defense services through

- a) Coaching for NET/SET for SC/ST/OBC (excluding creamy layer) & Minorities (Mathematics)
  - b) Coaching Class for entry in services for SC/ST/OBC (Non creamy layer) and Minorities
  - c) Guidance provided through guest lecture
- Guest Lecture by Mr. Sanjay Raghtate on 'Youth Day' , Director Oxford Speaker Academy, Nagpur on 12<sup>th</sup> January 2011.

- Dr. Nareshchandra Kathole, Guidance on Competitive Examinations on 17<sup>th</sup> September 2011
- Dr. P.N. Pabrekar, Padvidharankarita Career Sandhi on Dt. 28 January 2015.

Session	Examination	No. of Students Qualified
2010-11 To 2014-15	CENTRAL/STATE SERVICES	25
	NET/ SET/GATE	02
	DEFENSE SERVICE	03

**5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)**

**Academic & Career Counseling:**

- The College has Career Counseling cell which runs through merged scheme of UGC (XIth Plan). This cell helps students to choose their career related jobs.

The college has Equal Opportunity Centre through merged scheme of UGC (XIth Plan) to provide Personal & Psycho-Social counseling. When the students face any kind of personal or social problem, the teacher concerned is very supportive in guiding them to resolve their problems.

- College has admission counseling committee helps students during admission process.
- Personnel counseling is provided through Guardian –Teacher and Grievance committee.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If ‘yes’, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students**



**selected during campus interviews by different employers (list the employers and the programmes).**

The Institution has career and counseling cell through which student are guided to occupy top position in their field. A Career Guidance Cell is functioning in the college and acts as a centre for identifying job opportunities in different sectors.

#### **Workshop of under career counseling**

- Guest Lecture by Mr. Sanjay Raghtate on ‘Youth Day’, Director Oxford Speaker Academy, Nagpur on 12<sup>th</sup> January 2011.
- Dr. Nareshchandra Kathole, Guidance on Competitive Examinations on 17<sup>th</sup> September 2011
- Mr. Girish Tilak, Director of Resume Consultancy, Mumbai guided on Soft Skill Development.
- Dr. P.N. Pabrekar, Padvidharankarita Career Sandhi on Dt. 28 January 2015.

#### **List of Employer & Selected Students.**

<b>Sr.</b>	<b>Name of Company</b>	<b>Date</b>	<b>Name of Student</b>
1	Infosys , Pune	21/06/12	Mr. Swapnil Ingle
2	Border Security Force	15/07/12	Mr. Satish Ludarkar
3	Cognizent Soft Pvt. Ltd.,Pune	20/07/12	Ku.S.D.Kulkarni
4	Cognizent Soft Pvt. Ltd.,Pune	20/07/12	Ku.Priyanka Thorat
5	State Bank of Hyderabad, Akola	15/10/12	Mr. Ashish Gosavi
6	Commission Officer in Army	12-13	Lept. Abhineet Sharma
7	Commission Officer in Army	13-14	Mr. Anshu Jagmohan
8	Cognizant Soft Pvt. Ltd. Pune	13-14	Mr. Ankesh Wani
9	Cognizant Soft Pvt. Ltd. Pune	13-14	Mr.Akshay Wani
10	Cognizant Soft Pvt. Ltd. Pune	13-14	Ms. Archana Kharat

11	Cognizant Soft Pvt. Ltd. Pune	13-14	Ms. Devika Sharma
12	Infosys , Pune	28/01/15	Ku.Bhavana M.Tripathi
13	Infosys , Pune	28/01/15	Ku. Krutika Deshpande
14	Infosys , Pune	28/01/15	Ku. Ritika Bhalerao

**5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

Yes, in response to the University guide lines, the college has grievance redressal cell. It was established with the intention of providing a platform for the students and staff to address their suggestions and grievances. It has a coordinator and a representative from staff. No major complaints have been received during last four years. Most common complaints received from student are about library facility, classrooms, annual gathering, maintenance of girl's common room etc. Meetings are conducted periodically. If any grievance is reported then the cell is highly committed to sort out it at the earliest. We have a suggestion box located in front of the Principals office. Students are free to report their grievances through suggestion box.

**5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

- As per the UGC norms, the college established Grievance committee under code of conduct and Visakha Committee having girl representatives on

them to resolve any issue regarding sexual harassment at the work place.

The committee comprises of Lady Doctor and well known advocate.

- Due to healthy and cordial relationship between teaching, non-teaching and student community no instance of sexual harassment has been reported in college till today.
- The flex addressing “Eve-teasing is strictly prohibited” has been placed on the front wall of the college.
- Keeping in view of high percentage of girl students in college CCTV cameras are installed to monitor the campus to avoid the untoward incidence.
- Visakha complaint box is fixed in front of ladies common room.

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

- Yes, as per Maharashtra state’s ordinance 33/1999, an Anti-ragging Committee has been formed in our college. This committee takes efforts to bring awareness among students about the ill effects of ragging.
- On the first day of the college, welcome address of Principal is arranged in which announcement is made that ragging is strictly prohibited and that any instance of ragging will be strictly handled.
- An anti-ragging board is displayed in the college campus at noticeable place. Till date no case of ragging of any kind has been reported.
- The college has also Discipline committee which works to avoid any mishap in the campus.

**5.1.13 Enumerate the welfare schemes made available to students by the Institution.**

The Welfare schemes made available to students by the institution are as follows:

- Equal Opportunity Centre (UGC Merged Scheme)
- Career Counseling cell (UGC Merged Scheme)
- NET/SET coaching (UGC Merged Scheme)
- Coaching Classes for Entry in Service (UGC Merged Scheme)
- Consumer society
- Health club facility after college hours.
- NRC centre (Under UGC Scheme)
- Campus Interview
- Hostel facility for women (Under UGC Scheme)
- Sport adventure tour
- Student Safety Insurance
- Scholarship Schemes
- Travel Scheme
- Blood Grouping Camp
- If any student needs blood in case of personal emergency then college helps to get immediately blood from the Blood Bank of District Government City Hospital.

**5.1.14 Does the institution have a registered Alumni Association?**

**If 'yes', what are its activities and major contributions for institutional, academic and infrastructure Development?**

Yes, the Alumni Association of the college is registered .Every year Alumni Meets are held on 24<sup>th</sup> December on the occasion of Late Principal Shri M. G. Joshi memorial programme and prizes have been distributed by prominent alumni member as a chief guest. Alumni Association provides suggestions for betterment of academic career and is always ready to help at the times of need to the college.

Details of the contribution made during the last four years are as follows:

- Organization of Blood donation camp in joint venture with NSS, NCC & Sports Dept.
- A board has been set up outside the principal's office addressing thought for the day which helps to enhance moral values.
- Organizing workshop on the topic "How to increase your acceptability" in joint venture with Internal Quality Assurance Cell (I.Q.A.C.).
- Hon'ble Justice Zaka Ul Haq, Bombay high court visited and shared experiences in the Workshop "Judicial services as a career".
- "Netra Jyoti" Programme on Eye donation awareness jointly conducted with Central Bank of India
- Sky Observation Club (SOC) conducted programmes about awareness & creating interest in Astronomy and Space Sciences.

## 5.2 Student Progression

**5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the trends observed.**

Student progression	% (Approximate)
UG to PG	30-50 %
PG to M.Phil.	N. A.
PG to Ph.D.	5-10%
Employed	
<ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	8-12% 15-20%

**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)?**

**Furnish programme -wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

**Program wise pass percentage:**

Sr. No.	Programme	Semester	Result (%)			
			2010-11	2011-12	2012-13	2013-14
1.	B.Sc. I	I	39.08	40.00	44.62	48.53
		II	36.13	52.43	62.46	59.44
2.	B.Sc. II	III	35.24	44.32	32.35	42.91
		IV		47.37	49.79	55.60
3.	B.Sc. III	V	69.77	40.63	67.59	69.31
		VI			79.82	85.79
4.	M.Sc. I (Mathematics)	I	10.14	12.12	12.35	6.74
		II	12.50	5.88	19.72	45.35
5.	M.Sc. II (Mathematics)	III	26.92	18.18	34.48	21.15
		IV	54.55	25.00	17.85	15.38
6.	M.Sc. I (Chemistry)	I	37.50	55.56	33.33	50.00
		II	13.13	52.94	100.00	23.53
7.	M.Sc. II (Chemistry)	III	-	38.40	62.50	61.53
		IV	-	7.69	81.25	88.89
8.	M.Sc. I (Microbiology)	I	-	15.38	89.47	92.86
		II	-	57.14	94.74	93.75
9.	M.Sc. II	III	-	-	75.00	94.74

(Microbiology)	IV	-	-	100.00	100.00
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**Programme wise completion rate (in %) for the last four years:**

Sr. No.	Programme	2010-11	2011-12	2012-13	2013-14
1	B.Sc.	44.44	33.12	36.55	58.21
2	M.Sc. Mathematics	15.78	7.24	7.58	13.58
3	M.Sc. Chemistry	--	6.25	72.22	73.33
4	M.Sc. Microbiology	--	--	30.77	94.74

**Programme wise comparison of results of Institution and that of the colleges of the affiliating University within the district  
2010-11**

Programme	Semester	Shri R.L.T. college of Science, Akola	S.G.B. Amravati University, Amravati	Dr.R.G.Rathod Arts & Science College, Murtizapr, Akola	Gulam Nabi Azad College, Barshitakli Akola
B.Sc. I	I	39.08%	15.58%	10.34%	0.65%
	II	36.13%	13.77%	5.17%	
B.Sc. II	III	35.24%	27.61%	36.36%	0.00%
	IV				
B.Sc. III	V	69.77%	19.55%	0.00%	0.00%
	VI				

**2011-12**

Programme	Semester	Shri R.L.T. college of Science, Akola	S.G.B. Amravati University, Amravati	Dr.R.G.Rathod Arts & Science College, Murtizapr, Akola	Gulam Nabi Azad College, Barshitakli Akola
B.Sc. I	I	40.00%	19.65%	30.51%	07.31%
	II	52.43%	22.37%	38.00%	
B.Sc.	III	44.32%	22.41%	22.22%	18.18%

II	IV	47.37%	22.18%	42.32%	
B.Sc. III	V	40.63%	22.62%	33.33%	20.00%
	VI				

**2012-13**

<b>Programme</b>	<b>Semester</b>	<b>Shri R.L.T. college of Science, Akola</b>	<b>S.G.B. Amravati University, Amravati</b>	<b>Dr.R.G.Rathod Arts &amp; Science College, Murtizapr, Akola</b>	<b>Gulam Nabi Azad College, Barshitakli Akola</b>
B.Sc. I	I	44.62%	24.72%	36.36%	21.87%
	II	62.46%	45.09%	46.24%	
B.Sc. II	III	32.35%	19.39%	43.59%	59.37%
	IV	49.79%	43.25%	58.97%	
B.Sc. III	V	67.59%	13.97%	50.00%	66.66%
	VI	79.82%	31.53%	86.67%	

**2013-14**

<b>Programme</b>	<b>Semester</b>	<b>Shri R.L.T. college of Science, Akola</b>	<b>S.G.B. Amravati University, Amravati</b>	<b>Dr.R.G.Rathod Arts &amp; Science College, Murtizapr, Akola</b>	<b>Gulam Nabi Azad College, Barshitakli Akola</b>
B.Sc. I	I	48.53%	29.85%	24.35%	21.87%
	II	59.44%	43.30%	40.00%	



B.Sc. II	III	42.91%	32.76%	34.48%	59.37%
	IV	55.60%	43.02%	50.60%	
B.Sc. III	V	69.31%	46.46%	55.26%	66.66%
	VI	85.79%	64.20%	81.58%	

**Comparison of M.Sc. Chemistry (in %) for the last four years**

Session	Programme	Semester	Shri R.L.T. College of Science Akola.	Shankarlal Khandelwal College Akola.
2010- 2011	M.Sc. I	I	37.50	21.43
		II	13.13	35.71
	M.Sc. II	III	----	----
		IV	----	----
2011- 2012	M.Sc. I	I	55.56	20.00
		II	52.94	56.25
	M.Sc. II	III	38.40	42.86
		IV	7.69	0.00
2012- 2013	M.Sc. I	I	33.33	13.13
		II	100.00	83.30
	M.Sc. II	III	62.50	0.00
		IV	81.25	50.00
2013- 2014	M.Sc. I	I	50.00	6.25
		II	23.53	6.67
	M.Sc. II	III	61.53	81.82
		IV	88.89	81.82

**Comparison of M.Sc. Microbiology (in %) for the last two years**

<b>Session</b>	<b>Programme</b>	<b>Semester</b>	<b>Shri R.L.T. College of Science Akola.</b>	<b>Shri Shivaji College Akola.</b>
2012-13	M.Sc. II	IV	98.00	100.00
2013-14	M.Sc. II	IV	100.00	94.74

**5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?**

The college has three PG programmes and three research centers in Mathematics, Microbiology & Chemistry subjects to enhance student's progress at higher level of education. Students are also directed through seminars and workshop to acquire higher education.

- Network Resource Centre.
- College provides facility of NET/SET coaching for SC/ST/OBC & minority through UGC schemes(82No. of Student Beneficiaries)

Our students Ms. M.T. Sarode and Mr. Athar Husain have cleared  
NET (MATHS) Examination in the June 2011.

- Coaching for entry in services for SC/ST/OBC & minority through UGC schemes. (216 No. of Student Beneficiaries)
- Carrier Counseling Cell through UGC schemes.

**5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

Those students who are at risk of failure, Remedial coaching is provided.

Teaching staff of various departments identify slow learners and engage extra classes for them. Emotional and educational support is provided under Guardian teacher scheme. In Parent Teacher Association (PTA) meeting special attention is given on counseling to parents about the students who are at risk of failure and drop out.

### **5.3 Student Participation and Activities**

#### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

- The college supports as well as promotes for all round personality development of the students by conducting wide range of sports activities, and cultural activities etc.
- There are lots of activities which enhance creative talents of the students such as ‘Sangit Sandhya’ and elocution competition conducted in sponsorship of “Natwarlalji Chaudhari” by society every year.
- Student of our college have paved the trend to stand in top three in the debate competition conducted by Babuji Deshmukh Vachanalya, Akola every year.
- The whole staff encourages the students to participate in the event like ‘Youth Festival’ provides platform to exhibit their talents.
- Every year in the beginning of the session, welcome address is conducted for newly admitted students of B.Sc. I Year in which Principal addresses the students and Director of Physical Education, NSS Programme Officer, NCC Care Taker & Librarian disseminate the information about the various schemes and activities run by the college.

**Games of Sports Event conducted by College during the year of 2013-14**

<b>Sr. No.</b>	<b>Event</b>	<b>Remark</b>
1	Table Tennis	All Event conducted as per University Schedule
2	Badminton	
3	Volleyball	
4	Athletics	
5	Wresting	
6	Boxing	
7	Judo	
8	Chess	
9	Taekwondo	
10	Youth Festival	

**List of programme held by college during the year of 2013-14.**

<b>S. No.</b>	<b>Date</b>	<b>Details of Programme</b>
1	15-08-13	Independence Day Celebration and Tree Plantation Programme
2	05-09-13	Teachers Day celebration
3	24-09-13	N. S. S. Foundation Day Programme
4	24-12-13	Blood Donation and Prize Distribution Programme Late. Principal M. G. Joshi Memorial Day
5	12-01-14	National Youth Day
6	14-01-14	Foundation Day of B. G. E. Society, Akola, 'Sangit Snadhya'
7	26-01-14	Republic Day Celebration as a Achievement Day
8	28-02-14	Science Exhibition held in college on the eve of National Science Day 'in collaboration with Lokmat Yuva Next.
9	1-7-03-14	AIDS Awareness Week under Red Ribbon Club
10	10-03-14	Send off Programme of B.Sc.-III and M.Sc.-II and Cultural Programme held at Auditorium Hall, Savitribai Fule Death Anniversary

		Programme
11	07-04-14	Voters Awareness Campaign
12	14-04-14	‘Chauda Tas Abhyas-Vikasacha Dhyas’ A program on Dr. Babasaheb Ambedkar Jayanti organized by the college, where 100 students participated from 5 am- 7 pm

- Every year Tree Plantation Programme is organized on Independence Day.
- No Vehicle Day is observed on 1<sup>st</sup> and 15<sup>th</sup> day of the month.

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years.**

The details of major achievements are shown above in table 5.1.4 (IV)

**5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the Institutional provisions?**

The college collects feedback on teaching from UG to PG students through teaching- learning evaluation and then takes initiative to enhance the quality of academic excellence. Feedback collected on syllabus content from the students is conveyed to the member of board of studies and also discussed in the annual meetings of the teachers association for the further improvement of the syllabi.

Feedback collected from the students by college evaluation committee on infrastructure, Library facilities, Sports, NSS & NCC discussed at departmental level as well as suggestions of employees through informal talk are also discussed in LMC meeting and changes are brought accordingly.

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material?**

**List the publications/ materials brought out by the students during the previous four academic sessions.**

Every year college publishes the annual magazines “Pratibimb” for nourishing creative talents and literary genius. The annual magazine covers ideas of the students and teachers through articles on different aspects. The college departments publishes article through wall magazine like “*InfoChem*” , “ZEBRA” & “MICRAN” making a significant contribution in creating subject interest among the students which encourages them to publish science article of their interest. Beside these students produces some literature of English, Hindi and Marathi of linguistic beauty. The students are involved by assigning work on editorial board of the magazine.

**List of the publications and material brought out by the students in the last four years given below.**

	<b>Sr. No.</b>	<b>Name of the students</b>	<b>Title/ Article</b>	<b>Class</b>
<b>2010-11</b>	1	Ms. Ashwini Sone	Shahidanchya Smarnarth	B.Sc.-I
	2	Ms. Sunayana Narwade	Stree (Modern India's Woman)	B.Sc.-II
	3	Mr. Akash Ambhore	Personality Development Through Sports	B.Sc.-I
	4	Ms. Aswini Deshmukh	Tribute	B.Sc.-I
	5	Mr. Mithilsesh Dubey	Sports and Education	B.Sc.-I
	6	Mr. Gopal Nimkarde	Nationalism : A Scourge of Mankind	B.Sc.-II
	7	Mr. Mohd. Asif	We Need to Clear Naxal Policy	B.Sc.-II
	8	Mr. Madhusudan	The Status of Women	B.Sc.-II

		Bathe	in Indian Society	

2011-12	<b>Sr. No.</b>	<b>Name of the students</b>	<b>Title/ Article</b>	<b>Class</b>
	1	Ms. Suchita Pachpor	Vansampada	B.Sc.-I
	2	Ms. Amruta Shelkar	Vruksha Aai	B.Sc.-I
	3	Ms. Meena Dabe	Chimurdi Kali Va Shakshar Zhade	B.Sc.-I
	4	Ms. Anuradha Bhargade	Vansampdeche Mahatwa	B.Sc.-I
	5	Mr. Mandar Nawghrre	Manav Jeevan Shaili Evam Vanya Jeevo ki Uttar-Jeevita	B.Sc.-I
	6	Ms. Apala Chakraborty	Green Earth, Clean Earth	B.Sc.-I
	7	Ms. Priya Daiya	Trees	B.Sc.-I
	8	Mr. Nihil Gawande	Importance of Forests	B.Sc.-II

2012-13	<b>Sr. No.</b>	<b>Name of the students</b>	<b>Title/ Article</b>	<b>Class</b>
	1	Ku. Diksha Band	Challenges Before Youth	B. Sc.-I
	2	Ku. Mamata Ganode	Yuva	B. Sc.-I
	3	Ku. Aarati Sable	Yuth	B. Sc.-I
	4	Ku. Sandip Toshniwal	Go Ahead Youth	B. Sc.-II
	5	Ku. Pawan Chandak	Today's Generation	B. Sc.-I
	6	Ku. Trishila Adwani	Swami Vivekanada	B. Sc.-II
	7	Ku. Ankita Kabra	Life	B. Sc.-II
	8	Ku. Rasika Udapure	Failure to Success	B. Sc.-II
9	Ku. Insiya Vora	Ideals to be Followed	B. Sc.-I	

2013-14	<b>Sr. No.</b>	<b>Name of the students</b>	<b>Title/ Article</b>	<b>Class</b>
	1	Ku. Preeti Pohekar	Science	B. Sc.-I
	2	Ku. Shivan Shirsat	Environment	B. Sc.-I
	3	Ku. Madhuri Kalantri	Superstition, Nature's Mystery	B. Sc.-II
	4	Ku. Ankita Fursule	Tree- Source of Life	B. Sc.-II
	5	Ku. Guari Bunde	Save Girls	B. Sc.-II

	6	Mr. Mohinder Arora	Shale-Shell for Future	B. Sc.-II
	7	Mr. Ashwin Bansod	Ozon Depletion	B. Sc.-II
	8	Ku. Harshda Korde	Needs to protect Environment	B. Sc.-I
	9	Ku. Bhavana Tripathi	Minmata Convention	B. Sc.-II
	10	Ku. Manju Pariyani	Miracle and Science	B. Sc.-III
	11	Ku. Urja Shah	Hard Executes Eminence	B. Sc.-III
	10	Ku. Manju Pariyani	Miracle and Science	B. Sc.-III
	11	Ku. Urja Shah	Hard Executes Eminence	B. Sc.-III

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

The college has student representative council constituted as per the Maharashtra University Act 1994. Student University representative elected by conducting election, Principal acts an electoral officer who conducts the election in presence of in charge of NSS, NCC, Cultural committee and Director of Physical Education. In the election process one student from UG to PG is selected as a class representative on the basis of higher number of marks and representative one each from Sports, NCC, NSS and Cultural are selected for the formation of SRC body of the college. Out of total 11 members one is elected as a university representative of the college, who can contest the election at university level for different positions. The SRC is funded by the amount collected from the students at the time of admissions. Additional financial assistance is also provided by Department of Students Welfare of University.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

- The Library committee has one student representative.
- The Grievance Redressal Cell has one student representative.



- The Anti-ragging committee has one student representative.
- The NSS advisory committee has one student representative.
- Girls Hostel committee is formed in the college.
- The College has MICRANS, student's society run through Microbiology department.

#### **University Students Representative Council**

<b>Sr. No</b>	<b>Session</b>	<b>Name of Student</b>	<b>Post Held</b>
1	2010-11	Mr. Gopal Nimkarde	U.R. of College & Member of University Council S.R.C. Body
2	2011-12	Mr. Tushar Ghope	U.R. of College
3	2012-13	Mr. Anshu Jagmohan	U.R. of College
4	2013-14	Ms. Prachi Tathurkar	U.R. of College & Member of University Council S.R.C. Body
5	2014-15	Mr. Mohindar Arora	U.R. of College & Member of University Council S.R.C. Body

#### **The SRC of the college during the year 2014-15.**

<b>2014-15</b>	<b>Sr. No.</b>	<b>Name of the students</b>	<b>Class Representative</b>
	1	Ku. Nikita R. Chawala	B.Sc.- I Representative
	2	Ku. Khushbu A. Agrawal	B.Sc.- II Representative

	3	Ku. Barkha R. Wadhvani	B.Sc.- III Representative
	4	Mr. Amar N. Nikhan	M.Sc.- I Representative
	5	Ku. Pooja K. Pawar	M.Sc.- II Representative
	6	Mr. Swapnil G. Mesare	N. S. S. Representative
	7	Mr. Mohinder M. Arora	N. C. C. Representative
	8	Ku. Rashmi D. Mandurkar	Sports Representative
	9	Ku. Ritika S. Bhalerao	Cultural Representative
	10	Ku. Shubhangi A. Laghe	Lady Representative
	11	Ku. Soniya P. Nagre	Lady Representative

**5.3.7 How does the institution network and collaborate with the alumni and former faculty of the institution.**

- The institute has registered alumni association. Every year general meeting of alumni is held in the college through which strong and cordial relations are maintained with them.
- The alumni and former faculties of the college render all possible help in administration and academic event, visit the respective departments and occasionally deliver guest lectures.
- In association with alumni of the electronic department of the college, Electronic Display Boards are installed at noticeable places.
- Alumni association has instituted some special cash prizes to enhance student achievements.

**Alumni Association during the Year 2014-15.**

<b>Sr. No.</b>	<b>Alumni</b>	<b>Position</b>
1	Mr. Ashok Pandya	President
2	Mr. Adv. R.P. Nagare	Vice President

3	Mr. Avinash Ukhalkar	Secretary
4	Mr. Dilip Pitake	Joint Secretary
5	Mr. Shailesh Bhatiya	Treasurer

<b>Members</b>			
<b>Sr. No.</b>	<b>Name</b>	<b>Sr. No.</b>	<b>Name</b>
1	Mr. Mukund Joshi	11	Dr. Archana Pethe
2	Mrs. Jyoti Deshmukh	12	Mr. Sunil Jadhav
3	Mrs. Radhika Sathe	13	Dr. Sanjay Tiwari
4	Mr. Shrikant Bawishi	14	Mr. Shriram Joshi
5	Mr. Vivek Mantri	15	Mr. Sachin Potdar
6	Mr. Laxman Khatri	16	Mr. Sanjay Satav
7	Adv. R.P. Umale	17	Mr. S.W. Patil
8	Ms. Krutika Kulkarni	18	Mr. Shirsat
9	Mr. Vijay Bhattad	19	Mr. Vanve
10	Ms. Sulbha Kulkarni	20	Ms.Dhanashri Sone

**Any other relevant information regarding Student Support and Progression which the college would like to include.**

**Shri R. L. T. College of Science, Akola**

#### **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

##### **Summary**

- Educational atmosphere of our college helps and motivates students to stand in Merit List of University.
- Due to maximum facility for research, students are awarded colour coats in research
- Festival “Avishkar”. Students have also been selected for “Anvention” National Level Research Festival.
- Student representing College in various sports event laid down tradition of getting colour coats as well as to participate in West Zone

or All India Inter University Tournaments through Department of Physical Education. Every year players are awarded by Gold, Silver or Bronze medal in Inter Collegiate Tournaments of University in various sports event.

- Extension Work of Department of Physical Education is fully devoted for poor and needy students from different Schools or Colleges. Extension work fully engages spare time of students in positive activity so that they get sports achievement certificates in various events. These sports achievement certificates help them to get jobs in different fields as per government rules.
- National Social Scheme has a great history to complete social responsibility. Activities of this scheme help students to develop their personality through organization of various programme in campus and outside of the campus.
- Aim of National Cadet Corp is “Life devoted for Nation”. The NCC aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens. This aim motivates students to develop their personality for Nation Security.
- Institution identifies enthusiastic student and motivate them to take part in various cultural activities organized by institution. So that students get social recognition by creating their own identity in the society.
- No major issue has been reported related to Grievance, Sexual Harassment and Ragging till date.
- Students Representative Council actively cooperates in every activity of college. Our University Representative or College Secretary has been selected as a member in University Students Representative Council.
- Alumni Association helps institution in various programs and develops

entrepreneurial skills among interested students for business.

- University Grants Commission's various schemes are fully utilized for the betterment of student's life progression.
- Feedback from students is most important for development of institution. Institution is ready to bring changes as per the suggestions related to student's progression.

## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

**6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

#### **VISION**

To become one of the best educational institutions in the country aspiring for national recognition of excellence through teaching, learning, research and extension in the field of science and technology.

#### **MISSION**

Shri Radhakisan Laxminarayan Toshniwal College of Science dedicates itself to the cause of science education and propagation of scientific temper among the students. It seeks to mould student into a multifaceted person with a Pragmatic mind and a human outlook capable of facing the challenges of the 21<sup>st</sup> century. Shri R.L.T. College expects every student entering its portal to be a disciplined, hardworking well read member of the community ready to give ones best to the country.

#### **Distinctive characters of Institution**

With respect to the aims and objectives of the institute to cater the needs of economy, society and country as whole our institute contributes substantially to the development of nation

1. It provides and creates the scientific attitude among the students.
2. It creates the sense of social awareness and patriotism among the students
3. It introduces sense of the values of self respect, discipline, devotion, determination and dedication among the students.
4. It introduces sense of co-operation and co-ordination among the students.
5. It empowers all its beneficiaries through value based quality Education.
6. The main thrust of the institution is to prepare the students to achieve core Competencies to meet the global requirement successfully.
7. With extensive sports activity the college tries to create sportsmanship and Professionalism in students
8. Through the NSS, NCC, it helps awareness raising campaign and seeks Social justice and equal opportunity for all.

### **6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

**Management:** On the auspicious day of **Makar Sankranti (14 Jan.1935)** an admirer of the education Late Shri Baburao Joshi and his crony founded the institution now known as “**The Berar General Education Society**” the BGE Society at Akola Late Shri Karnik was a Pioneer President of this society with generosity of the local donors. The BGE society grew like the Banyan tree under which five colleges and two schools are serving the Noble cause of education. The dedicated teachers serving in the institution under the BGE society won the trust of the people of the Vidarbha in respect of quality of education. It is a matter of pride for us that the BGE society runs our college.

1. The Berar General Education Society’s Shri RLT College of Science Akola is one of the premier institutions, delivering excellent education through dedicated collaborated efforts towards achieving recognition and honour at National and International levels.

2. We strive for providing an advanced academic environment, innovative techniques and creating value based globally competitive professionals through well directed honest efforts. In order to discharge our noble responsibilities towards the world of science at large we keep organizing state level, national level conferences and seminars.

3. Following the guidelines of the management the principal and the faculty work on the details of the policy and charter out plans both long term as well as short term to achieve the goal

4. By management various prizes are distributed on the death anniversary of Late M. G. Joshi.

5. Management provides financial help for NCC, NSS camps. Though the college has not got any sufficient fund, still college conducts the NSS camp and its regular activities with the help of management fund.

6. College provides TA/DA to all staff members attending conferences, seminars, workshop and symposia.

7. Management provides financial support to the faculty members who are registered for M. Phil and Ph. D. (7,500 /- for each staff registering for Ph. D).

1. Every year on the eve of B. G. E. society foundation day principal of college reads the report of college progress in front of management and all faculty members and administrative staff of the B. G. E. society

2. Principal holds meeting with all HODs in which academic and administrative decisions are taken and views expressed by HODs are given due weightage by principal. Principal holds meeting time to time with teaching and non teaching staff ALSO.

3. Principal inspires staff members for better result. He motivates staff members to undertake the research project.

4. He monitors the overall day to day working of institute.

5. He follows democratic and active participative style.

**Faculty:** 1. HODs and faculty coordinate and plan their individual departmental activities and report to the principal accordingly.

2. Administrative staff also works under the instruction of principal and superintendent there by co-coordinating entire administrative work.

### **6.1.3 What is the involvement of the leadership in ensuring?**

At the beginning of academic year the welcome address of the principal is organised for the newly admitted students of B. Sc. I. The students are made aware of the goal statements, academic policy plans discipline and other important aspects. This year well come address of the Principal was organised on 5/7/14 at 12, noon in the same programme chairman of admission committee felicitated newly admitted top ten merit students. B. Sc. III student handed over the *Mashal of Education* to B. Sc. I students to continue the culture and trend of college.

#### **Leadership ensures**

1. Formulation of action plans for fulfillment of the stated mission
2. Formulation of action plans for all operations and incorporation of the same into the institutional strategies.
3. Interaction with all stake holders.

#### **• The policy statements and action plans for fulfillment of the stated mission**

1. Through the staff council meeting conducted by principal in the beginning of the academic session, the faculty is given instructions regarding the new programmes and projects adhering to the quality policy of the Institution.

2. Facilitated by the management and supported by the staff, the head of institution

is at the helm of the affairs and plays the leading role in governance and Management of the Institution.

3. It is he who communicates the vision and mission to the faculty and plans Accordingly with the help of the Academic council and other bodies.

4. It is he who ensures transparency in the functioning of the college and maintains core values

5. He also monitors the step wise implementation of the institutional plans.

#### **• Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.**

1. Meeting the academic demands the college plans its academic terms teaching and examination programmes.

2. Sports and cultural programmes, NSS, NCC camps and sport activities are planned and executed as per the rules and regulations of the university.

#### **• Interaction with stakeholders.**



1. Management, Alumni, Parent, teachers and students participate in all academic/extra-curricular/co-curricular activities.

2. All stake holders help to motivate, promote for upliftment of poor and needy people from society

• **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.**

1. Analysis of demands is made through interaction with student's parents and teachers.

2. Conferences, seminars and workshops and science exhibitions are also organized.

• **Reinforcing the culture of excellence.**

1. In all aspects of curriculum, institute helps academically (economically challenged) students.

• **Champion organizational change**

1. To meet new demands and challenges, new courses are added as per challenges of changing time.

2. Advanced equipments and training facilities provided by dept. of physical education to meet all demands of sports.

**6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

1. The executive committee of the management holds monthly meeting of its members in which the principal of college is invited.

2. The principal holds the meetings with HODs in which he receives the information regarding activities of various departments.

3. The principal holds meetings with the administrative staff.

4. Time to time Student Representative Council meetings are also held

5. Suggestion box is also placed for students. In this way the information regarding activities of the institution is received.

6. Each year college magazine *Pratibimb* is published which provides all formal and informal information and it is kept as college records.

7. At the end of session chairmen of all committee submits reports and these are kept as record of college.

8) Principal charts out plan with all HODs and put in front of LMC which makes recommendations for the improvement and up gradation of existing academic as well as extracurricular activities.

- 9) IQAC plays a role of general academic advisor to the college and is headed by the Principal. Majority of the members of the cell are all HODS and experienced teachers.
- 10) Teaching staff maintains academic diary, routine work is mentioned academic/curricular/extracurricular) maintained in the diary and is duly signed by HOD and weekly by Principal of college.
- 11) Every year at the end of session student-teacher evaluation committee evaluates teachers by providing feedback form to the students and due suggestions are received.
- 12) Class tests/ unit tests are conducted regularly in each semester and as per result policies for the improvement are made.
- 13) Remedial classes regularly conducted special time table for remedial class is prepared and classes engaged in addition to regular classes.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

- 1) In B. G. E. society there is provision of inclusion of teaching and non teaching staff as a invitee members in the executive committee. During last three years Dr. U. K. Bhalekar and Shri. K. Y. Patil are working as teaching and non teaching representative.
- 2) Management has provided fullest freedom to HODs. All HODs hold regular meeting for academic and administrative decisions.
- 3) HOD monitors overall day to day work of department and reports to Principal accordingly.
- 4) For smooth conduction of all co curricular/extracurricular and academic activities Chairman of each formed committee monitors the work.
- 5) Management provides all infrastructural facilities like staff room, Laboratories, equipment for faculty members.
- 6) Faculty members are motivated for attending orientation, refresher and short term courses.
- 7) Due to continuous motivation and encouragement faculties are recognized guides of universities.  
(Dr. V. D. Nanoty, Dr. S. M. Padhye, Dr. P. P. Deohate and Dr. P. T. Agrawal).

8. Management motivate faculty & provides financial help to the teacher registered for Ph. D.
9. Management provides funds for organization of workshop, seminars, symposium, science exhibition, workshop and NSS, NCC activities.
10. Management helps to generate funds for infrastructural development **(fund of last four years) (3.86 crore)**
11. Management organizes guest lecturers for all stakeholders.
12. Management also organizes health check camps for all employees of Berar General Education Society.

### **6.1.6 How does the college groom leadership at various levels?**

College groom leadership at various levels by-

1. Organizing the elocution, debate, essay competition, poster presentation competition, slogan competition, seminars etc.
2. Organizing society awareness programmes like **Blood Donation Camp, Street Plays, On Voter Awareness Camp (Matadar Jagruti Abhiyan) Save Girl Child (Beti Bachao) Anti Alcoholic Campaign, Anti Dowry Campaign, Anti Tobacco Campaign, Mission Clean India Annual sports day (28 August) etc.**
3. Principal holds meeting with teaching/Non teaching staff and administrative staff time to time and he receives information regarding activities of various departments.
  - 4) Head of the department maintains the internal supervision of the department, He charts out the academic, administrative, activities and also plans all departmental activities.
  - 5) Superintendent provides supervision of administrative activities, maintains college record/leave record/salary record etc.
  - 6) Student representative council holds regular meetings and provides due suggestion are received. SRC secretary also represents university, SRC plays vital role in all college activities.
  - 7) Management facilitates and motivates administrative staff to participate in other activities; Mr. Ananda Gawali, lab attendant working as district President of Maharashtra non teaching association since last four years. Kishor Shegokar, laboratory Attendant, is working as group leader of non teaching staff of college, to resolve problems of non teaching staff.

### **6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

1. All the activities in the college are monitored and controlled by Principal with the help of existing administrative staff. Principal of the college takes initiative to ensure effective co-ordination between and among the functionaries of the institution.
2. On the basis of various policies adopted by the institution objectives are laid down. Plans are made and a regular follow up is maintained, thereby encouraging greater support and co-ordination.
3. The heads of department and teachers co-ordinate and plan their individual departmental activities and report to the Principal accordingly.
4. The administrative staff also works under the instructions of the Principal and the Superintendent, thereby coordinating the entire administration work.
5. The internal quality assurance cell is established on the basis of guidelines set

up by NAAC. It helps the principal and the superintendent to coordinate and monitor the various activities.

6. Different reports such as departmental reports self appraisal reports, college annual reports and directives from government etc. become the base for analyzing and evaluating the overall performance of the institution

7. Co-ordination between various functional bodies is maintained due to decentralization of administrative work in college to make it most efficient and effective.

8. Administrative work is also monitored and maintained by principal.

9. The office administration of college is headed by superintendent, assisted by head clerks, sr. clerks, Jr. Clerks other class three and class four employies.

10. for the purchase of instruments/equipments up to 50,000/- quotations are called from various agencies and are compared.

11. College/department puts tender notices for purchase of equipment/infrastructure for more than 50,000 rs.

12. Purchase committee takes decision in meeting of purchase committee where all head of the departments coordinates.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

**Yes,**

1. B. G. E. Society works for the college with 17 executive members' and two invitee members from teaching /administrative staff of the college Dr. U. K.

Bhalekar, Mr. K. Y. Patil are

2. In LMC management involves three teaching and one non teaching representative. Now Dr. Dr. U. K. Bhalekar, Mr. R. D. Chandrawanshi and Mr. R. D. Chavan are working as teaching members and S. P. Patil of LMC.

3. College involves alumni association in planning and decision making policy of institution.

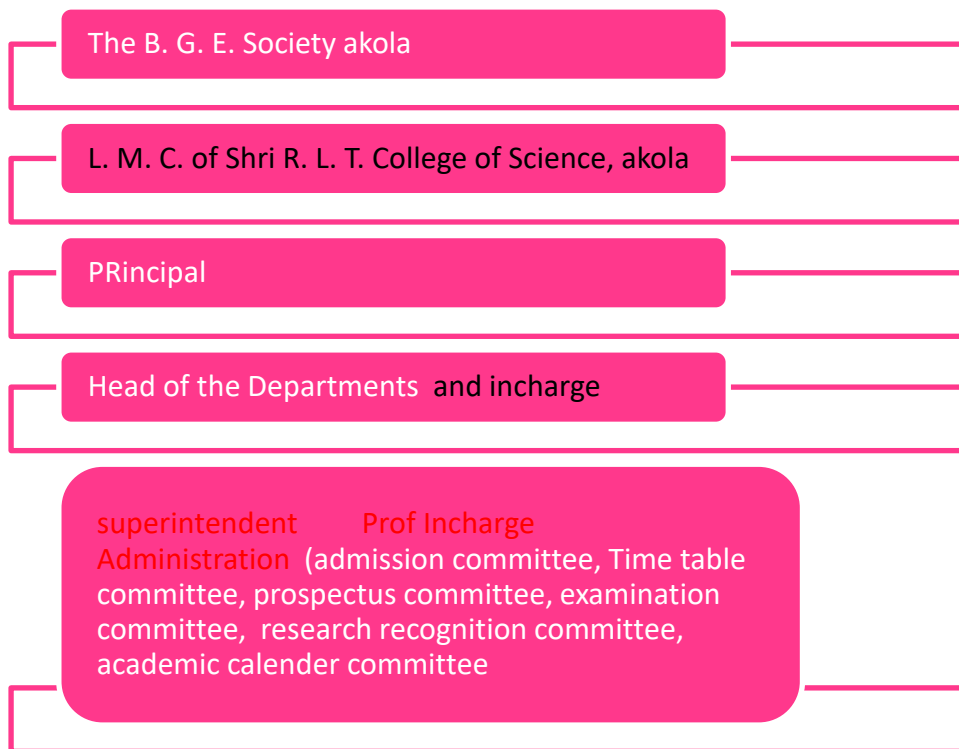
4. College conducts election for selection of university representative as per rules of Sant Gadge Baba Amravati University, Amravati the university representative participates in college functioning and is bridge between principal-staff in last three years college University representative has been a part of student representative council of Sant Gadge Baba Amravati

University, Amravati.

5. Each unit of college is given fullest freedom for planning for perspectives of development.

6. Each unit operates through structural organization for disciplined and smooth functioning.

7. chart given below presents organizational structure and its hierarchy.



## 6.2 Strategy Development and Deployment

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes,

1. Principal regularly interacts with all the stakeholders like Management, student's, teachers, parents and alumni about their future aspiration in the development of courses, infrastructures, teaching, learning and other related issues. All these aspirations along with future local and global environment become the base of formulation of perspective institutional plan.

2. College regularly prepares Academic Calendar for the year wise activities and event details which are included in the college prospectus for preparation of the Academic Calendar Committee is consisting of senior staff members.

### 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes,

1. For perusing vision and mission statement of college, the college has framed quality policy

2. The perspectives plans of institute are regularly developed by principal in consultation with management, senior faculty members and administrative staff.

3. Various schemes of UGC, SGBAU, Amravati and ministry of higher

education and requirement of jobs studied thoroughly to check out academic plans

4. It considers financial, academic aspects and works out phase wise implementing calendar and perspectives in an action as a development programme.

The plan of action for quality enhancement is as under:

- a) Applying for new Minor and Major Research Project under UGC grants to cultivate the research environment among the teachers.
- b) To plan for examination reforms to improve the college result.
- c) Construction of New Chemistry laboratory with advanced technology.
- d) Construction of two class room and conversion of room no. 9 and 10 in gymnasium.
- e) Construction of 7 more class rooms for the post graduate class on the room no. 4,5, and 6 in wing C.
- f) Construction of new mathematics department near the classes room above room no. 4, 5, and 6 in wing C.
- g) Development of new IQAC room near the Principal Cabine with all computer facility with internet.
- h) To motivate the students for research activity by encouraging them to participate in seminar competition, conferences, and in Avishkar activity.
- i) Construction of library on the first floor above the chemistry laboratory with advanced facilities.
- j) Drinking water Cooler for the students near room no. 16 and 17.
- k) Increasing infrastructure facilities in the college campus.
- l) To fixed the CCTV Cameras on various places in college campus.

### **6.2.3 Describe the internal organizational structure and decision making processes.**

1. As per guidelines given by SGBAU university act 1994 we strive hard for smooth and effective functioning of college.

2. Institution has developed efficient internal coordination and monitoring mechanism to meet the educational needs and demands of the nation in general and beneficiaries of the college in particular. The goals are set through collaborative and collective efforts of the various components of the

institution.

3. Responsibilities are assigned to the individual teachers and help from the external sources is taken whenever needed.

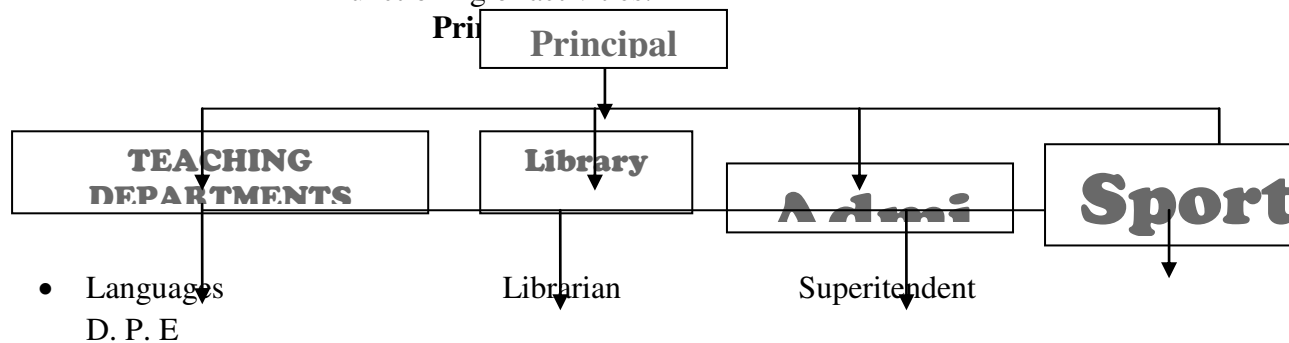
**Berar General Education Society:** Shri R. L. T. college of Science, Akola run by prestigious society The Berar General Education Society, Akola which is established on 14 January 1935 on the auspicious occasion of **Makar Sankranti** Late Shri G. V. Karnik was a pioneer President of this society Shri R. L. T. College of Science, Akola came into existence on 1<sup>st</sup> of April 1970. This is purely science college., Hon. Dr. R. B. Heda is present President of the Berar General Education Society and honorable Advocate Motisinghji Mohta is secretary of the Berar General Education Society. However the administration of Shri R. L. T. College of Science is the responsibility of the Principal who is directly accountable to the parent body. The governing body of the Berar General Education Society controls and approves the schemes of development.

**Local Managing Committee:** LMC is the statutory body formed as per the Maharashtra Universities act 1994. The LMC comprises of three teaching etc. and one non teaching elected representatives of teaching and non teaching staff, chairmen secretary and representative of management and experts from various fields, this committee can make recommendation for the improvement and up gradation of existing academic and extracurricular activities also. It prepares the budget and financial statements, as far as local managing committee is concerned every year in the month of February tentative budget for next financial year is placed by principal in the meeting, after that discussion is held on it and then it is passed unanimously.

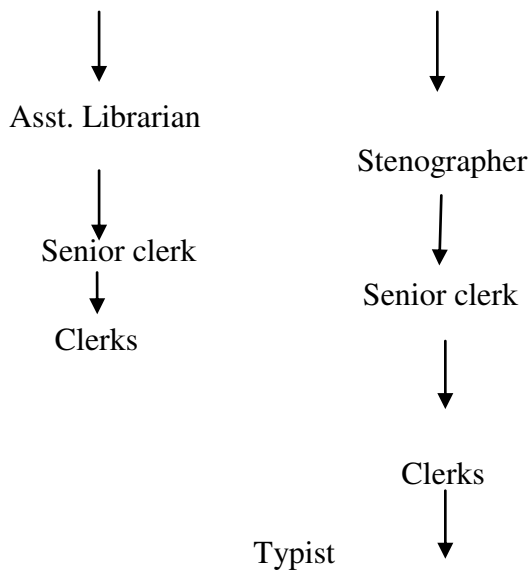
**Principal:** Principal of Shri R. L. T. College of Science, Akola is responsible for all administrative work and is accountable to the parent body i.e The B. G. E. Society principal plays important intermediate role in between management and teaching and administrative staff of college for smooth functioning with the help of 47 formed committees.

**Head of the Department:** All departmental i.e academic, curricular and extracurricular activities are carried out with the help of HOD and faculty member.

**Committee of Co-curricular and Extra-curricular activities:** All co-curricular and extracurricular activities are headed by chairmen for smooth functioning of activities.



- Botany
- Biochemistry
- Bioinformatics
- Computer Science
- Chemistry
- Electronics
- Information Technology
- Mathematics
- Microbiology
- Physics
- Zoology

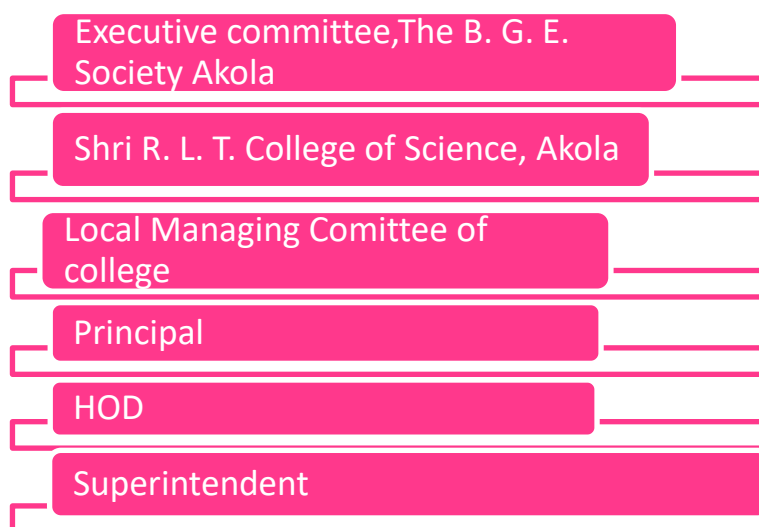


#### Allied Departments





## DECISION MAKING PROCESS



### Structure and functioning of various academic and administrative bodies of the institution

- 1) **IQAC**- As per the guidelines of NAAC, IQAC plays a role of general academic advisor to the college and it is headed by the Principal, coordinator most of the heads of the department and experienced teachers. Before start of session new schemes and plans are put forwards by the departments and the administrative committee to the principal and IQAC. These are then studied refined and approved by the governing body. The IQAC contributes to improve the teaching learning process with academic research and knowledge resource extension.
- 2) **Academic Calender Committee:** The academic calender committee constituted by Principal Dr. V. D. Nanoty comprises of the following members, Dr. S. M. Padhye Chairmen and Prof . P. R. Kawle as member. The activities of the calender cimmittee start with a meeting of members of the committee to discuss about the preparation of proposed academic calender of the college for next session. The academic calender for the every session sent by the S. G. B. A. U and it is refered, discussed and proposed the academic calender of the college for that session is prepared after the discussion with the principal the probable no. of the days to be utilised in admission, examination, non instructional days for the session is calculated and that is incorporated in the calender.

Table presents dates of meetings taken during sesion 2011-12 to 2014-15.

S. N.	YEAR	DATE OF MEETING	TIME	PLACE
1	2010-2011	22/04/11	12 Noon	Maths dept.
2	2011-12	09/03/12	12 Noon	Maths dept.
3	2012-13	04/03/13	12 Noon	Maths dept.
4	2013-14	15/04/14	12 Noon	Maths dept.

**3) Admission committee:** The admission committee constituted by Principal Dr. V. D. Nanoty comprises of the following members during session 2011-12 to 2014-15 for UG and PG.

1. Dr. U. K. Bhalekar
2. Dr. S. M. Nagrale
3. Mr. R. D. Choudhary
4. Prof. P. M. Khadse
5. Dr. P. T. Agrawal
6. Dr. P. P. Deohate
7. Dr. S. M. Padhye

Admission process is conducted as per the norms of Sant Gadge Baba Amravati University, Amravati the students are then admitted in college in various subjects of UG like Biochemistry, Chemistry, Information Technology, Bio- informatics, Microbiology, Mathematics, Physics, Electronics Computer Science, etc. and PG like Microbiology, Maths and Chemistry. Admission committee also monitors the strength of the students in various subjects, keeping a close watch on the admission per day. The admission committee allow the change of subjects of the students within a month of the admission.

S. N.	Year	Date of Admission From –To	B. Sc. I	B. Sc. II	B. Sc. III	M. Sc. I/II Maths	M. Sc. I/II Micro	M. Sc. I/II Chem	Total
1	2011-12	13/06/11 to 01/08/11	299	283	130	110	14	16	752
2	2012-13	04/06/12 to 06/08/12	234	238	109	120	23	28	842
3	2013-14	08/06/13 to 08/08/13	389	261	109	141	34	31	1046
4	2014-15	10/06/14 to 11/08/14	453	337	229	171	31	34	1255

- 4) Student Counselling Committee :** The student counselling committee was formed for the academic session 2010-11 and was continued for the next five academic session i.e upto 2014-15 Dr. S. W. Bhaware acts as chairman and Dr. A. H. Amley as member of committee.

Objectives of the committee are as follows

1. To guide the students to choose the proper groups and streams seeking the admission to Ist year of B. Sc. and M.Sc. Courses.
2. To help the students to decide their future career according to their previous performance and there areas of interest.
3. To provide the necessary information regarding the co-curricular activities like NSS. NCC. Sports and physical education to the students.
4. To provide the information regarding the UGC schemes to be run in the college like remedial coaching/NET/SET/ and career counselling cell etc.
5. To make the students as well their guardian aware of the regular attendance of their wards in the college and to give the necessary information regarding the hostel admission (for girls), dress code, health club etc.
6. To give the suggestion to students to overcome the difficulties regarding the admission and further learning process of the students.

Every year committee starts its work along with the admission committee sharp from the date of the opening of the college. It works through out the admission process in the admission office. A prescribed counselling forms are filled by most of the students willing to take admission and the students get admitted as a result of positive counselling. Counselling continue even after the process of admission is over. The following table shows the academic session wise data of students admitted after counselling.

S.N	Academic Session	Duration of Counselling	No. of Students
1	2010-11	10/06/10-02,08/10	593
2	2011-12	13/06/11-01/08/11	744
3	2012-13	14/0612-30/08/12	833
4	2013-14	10/06/13-14/08/13	1046
5	2014-15	09/06/14-25/08/14	1256

- 5) Time table committee:** The time table committee mainly aims to prepare the time table of Degree College/PG by holdings their meetings The time table committee consists of Chairman Prof. R. G. Chavan and all HODs as the members of the committee. Following chart shows the meetings hold by time

table committee. Centralized time table is prepared in the month of June keeping in view the probable number of students getting admitted in all the courses.

S. N.	YEAR	DATE OF MEETING	TIME
1	2011-12	19/06/11	3 pm
2	2012-13	28/06/11	3 pm
3	2013-14	10/06/13	3 pm
4	2014-15	27/06/14	3 pm

**6) Examination Committee:** Examination committee mainly aims to decide the schedule of class tests and prelims and modifications to conducts these examinations according to semester pattern of S. G. B. Amravati University Amravati about the dates of examination is discussed in the meeting of staff council and message of examination is conveyed to all teaching staff. The examination committee then prepares the time table of examination and seating arrangements for the examination. These document are then sent to each department and are also displayed on the board.

S. N.	YEAR	DATE OF MEETING	TIME
1	2011-12	10/8/11	1.30 pm
2	2012-13	13/8/12	1.30 pm
3	2013-14	7/9/13	1.30 pm
4	2014-15	2/9/14	1.30 pm

**7) UGC Committee:** This committee is headed by senior teacher, Dr. S. M. Padhye as chairman of this committee under guidance of Dr. V. D. Nanoty, Committee prepares proposals according to UGC schemes after taking the innputs from concerned departments.

Following proposals were prepared by the committee and approved by the UGC in last four years.

S. N.	Proposal	Date of sanction	Plan
1.	UGC basic development grant and merged scheme	30/03/2010	XIth
2.	Additional Assistance Grant	28/07/2011	XIth
3.	UGC Womens hostel grant	27/01/2012	XIth
4.	Development of sports infrastructure and equipment	20/12/2012	XI
5.	Establishment and development grant for IQAC	21/03/14	XIIth

**8) Student Representative Council:** As per the direction of S. G. B. Amravati University Amravati Student representative council is formed each year as per the university act 47(1). The norms of forming SRC are strictly followed and election is taken under observation of Principal and committee members of SRC. University Representative plays an important role as bridge between the teachers and students As per direction given by University, dates are also strictly followed and elected University representative form is sent to the University by sending special messenger of college to University.

University representatives in last five years are given in the table

S. N.	YEAR	DATE OF MEETING	Remark
1	2010-11	28/08/10 And 8/9/10	Gopal Nimkarde
2	2011-12	28/08/11 And 8/9/11	Tushar Ghope
3	2012-13	25/08/12And 5/9/12	Anshu Jagmohan
4	2013-14	24/08/13 and 4/9/13	Prachi Tathurkar
	2014-15	23/08/2014 and 04/09/14	Mohinder M. Arora

**9) Prize Distribution Committee:** It is the tradition of college to award prizes to the students having academic excellence. List of prize winners is prepared looking into University Gazette. Committee fixes the name of chief guest and invites him/her accordingly for the function on 24<sup>th</sup> December. The prize winners are also informed by sending letter and conveying through telephonic message. The function takes place on 24<sup>th</sup> December on occasion of death anniversary of Late Principal M. G. Joshi in auditorium hall of college.

S. N.	YEAR	DATE OF MEETING	Remark
1	2010-11	10/12/10	Every year 25 to 30 students are felicitated and approximately amount of rs. 25000 to 26000 distributed.
2	2011-12	17/12/11	
3	2012-13	17/12/12	
4	2013-14	10/12/13	
5	2014-15	17/12/14	

**10) Seminar Committee:** Every department conducts seminar as part of curriculum or part of departmental activity to introduce the development of soft skill in the students and to motivate the students to develop the confidence. All the heads of the departments are notified at the start of the session to arrange the seminar of the students during their regular classes. The seminars are to be held in two sessions one before the Diwali vacation and one after Diwali vacation. The topic of the seminar is allotted to each student delivering seminar at least 10 days prior to the date of seminar. The teaching aids, visualized charts, black board, OHP, LCD projector were made available to the students.

NO. of B. Sc./M.Sc Students who have deliver seminars in last four years are given below.

S. N.	YEAR	Boys	Girls	Total
1	2010-11	88	183	271
2	2011-12	134	213	347
3	2012-13	300	578	878
4	2013-14	419	831	1250

The students are encouraged by this activity and have improved upon their performance in terms of their knowledge stage daring and ability to answer the question.

**10) Career Guidance Cell:** Prof. U. K. Bhalekar working as chairmen for the career guidance cell of college the activity of the career guidance cell start from Month of august every year. Letters notices and pamphlets received from different institutes are displayed on the notice board. This cell organizes campus /off campus interviews. College career guidance cell conducts workshops and group discussion to improve the personality of his career and given the information about.

S. N.	YEAR	Industry	Student appeared	Students selected.
1	2010-11	IBM Gudgaon, Delhi	30	01
2	2011-12	Infosys	01	01
3	2012-13	Defence	01	01
4	2013-14	Defence	01	01
		Cognigent	04	04
5	2014-15	Infosys BPO	12	03

**6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following.**

**Teaching and Learning** -The college organizes many arrangements to improve teaching and learning processes as follows.

1. By giving protocol to each student and faculty
2. Providing internet access to all the departments
3. Participation in NCC/NSS/Co-curricular activities and Sports
4. Participation in departmental activities by enrolling in various subjects
5. It is impressed on the mind of the student that social good is more important than the personal well being
6. Creation of this firm conviction in their minds helps in making them well integrated personalities and good citizen of the country
7. By providing departmental library facility to students.
8. Faculty members of various departments adopt strategies like academic counseling, extra classes and tutorials for the slow learners so that they can cope with the programme in which they are enrolled. Easy learning notes are provided to them.
9. It has been observed that the communication skill of the rural students is weak so the college has a strategy to expose such students to English speaking through special arrangement. Extra classes are arranged for late admitted students.
10. The remedial coaching is given to the student's along with the NET/SET and MPSC/UPSC entry in services classes.
11. The add on certificate programmes i.e CCLT, DCLT and ADCLT are also run by the college to bridge the knowledge.
12. Through the assessment of classroom performance and performance in unit test/ class test question answer session, discussion and past academic record, the students with advanced learning capabilities are identified.
13. College conducts the unit test and class test examinations prior to the annual and semester end examinations of Sant Gadge Baba Amravati University Amravati and on the basis of the performance in these examinations, the students who are weak in their studies and performing below the average are identified.

**Research and Development:** college has established the research cell and faculty members involve themselves in research work. Research committee has decided to guide and motivate the newly appointed faculty members to do research and submit major and minor research projects from UGC. Microbiology, Chemistry and Maths departments have established dedicated research facilities. College library has provided infolibnet access to e-journals.

#### **Details of research Guide**

Sr.No	Departments	Research Guide	Area of Research
1.	Microbiology	Dr. V.D.Nanoty	<ul style="list-style-type: none"> <li>• Microbiology</li> <li>• Nanotechnology</li> <li>• Functional Analysis</li> <li>• Perturbation theory of linear operation,</li> </ul>
2.	Mathematics	Dr. S.M.Padhye	<ul style="list-style-type: none"> <li>• Spectral theory</li> <li>• Real analysis</li> <li>• Topology</li> <li>• Organic heterocyclic synthesis</li> </ul>
3.	Chemistry	Dr. P.P.Deohate	<ul style="list-style-type: none"> <li>• Microwave assisted green synthesis</li> <li>• Non-aqueous potentiometric determination</li> </ul>
		Dr. P.T.Agrawal	<ul style="list-style-type: none"> <li>• Physico-chemical studies of ground water and irrigation water</li> </ul>

College has research committee to monitor and address the issues of research.

Its composition is as fallow:

Sr.N	Designation	Name	Position	Qualification
0				
1	Principal	Dr. V.D.Nanoty	coordinator	M.Sc. Ph.D
2	IQAC Coordinator	Dr.P.T.Agrawal	Member	M.Sc.,M.Phil,Ph.D
3	HOD (Mathematics)	Dr. S.M.Padhye	Member	M.Sc. Ph.D
4	HOD (Chemistry)	Dr. P.P.Deohate	Member	M.Sc. Ph.D
5	HOD (Zoology)	Dr. S.M.Nagrале	Chairman	M.Sc., NET, Ph.D

**PhD students (2010-11 to 2014-2015) :**

PhD students	Microbiology	Chemistry	Mathematics
Registered	4	4	6
Completed/Awarded	3	1	2
Submitted	1	2	0

**• Major research project ongoing: 01 (Sanctioned amount- Rs 9,79,800/-)**

Sr	Name of	Department	Title	Agency	Remarks
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No	Faculty				Amount sanctioned
1	Dr. V.D. Nanoty	Microbiology	Analysis of bacterial efficiencies of metal nanoparticles and nanoparticles conjugated antibiotics for diverse biomedical applications in treatment of bacterial skin diseases.	UGC	9,79,800

• **Minor research project ongoing: 06 (Sanctioned amount- Rs 11, 20, 000/-)**

Sr No	Name of Faculty	Department	Title	Agency	Remarks/ Amount sanctioned
1	Dr U.K. Bhaleker	Microbiology	In-vitro assessment antimicrobial properties of metal nano-particals against bacterial skin diseases	UGC	2,00,000/-
2	Dr A.H. Amaley	Zoology	Study of web architecture, silk, silk glands and spinnerets of giant wood spider, Nephila pilipes	UGC	1,35,000/-
3	Dr. P.T. Agrawal	Chemistry	Synthesis of N-Lactosylated 1,2,4-dithiadiazolidines and their antimicrobial activity	UGC	1,30,000/-
4	P.R.Kawle	Chemistry	Synthesis of substituted Pyrazoles and Pyrimidines and study of their antimicrobial activity	UGC	95,000/-
5	R.D. Chandrawanshi	Physical Education	Vidarbhatil kustigiranna prapt honary sadhan suvidha....	UGC	1,20,000/-
6.	P.M.Khadse	Botany	‘Survey and phytochemical analysis of some medicinal plants used in diabetes from Katepurna region, Dist. Akola’.	UGC	4,40,000/-

• **Minor research project completed: 04 (Sanctioned amount- Rs 3, 60, 000/- )**

Sr No	Name of Faculty	Department	Title	Agency	Amount sanctioned
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1.	Dr. V.D. Nanoty	Micro-biology	Studies on antibiotic resistance and MIC of selected drugs against nosocomial bacterial pathogen in Hospital of Akola	UGC	<b>Rs. 90000/-</b> 2008-10
2	Dr. P.P. Deohate	Chemistry	Study of potential of N-aryl/alkyl-S-chloro isothiocarbamoyl chlorides and N-aryl/alkyl isocyanodichlorides in the synthesis of dithiadiazines, thiadiazines, triazines and their antimicrobial activity	UGC	<b>Rs.200000/-</b> -
3	Dr. S.M. Nagrale	Zoology	Assessment of Insecticidal and larvicidal properties of <i>Parthenium hysterforus</i> (congress grass) on mosquitoes of akola city	UGC	<b>Rs. 30000/-</b> 2011-12
4	Asst. Prof S.W.Bhaware	Mathematics	Mathematical Study of Plane gravitational waves in generalized Peres space time	UGC	<b>Rs. 40000/-</b> 2011-12

**Ph.D awarded and ongoing PhD during 2010-11 to 2014-15:**

Sr. No	Faculty PhD status	2010-11 to 2014-15
1	Completed and awarded Ph.D in Service	6 (PTA,SMN, SRK, SWB, AHA, UKB )
2	Registered for Ph.D and PhD work	6 (VNB,PMK,RDC,PPG,SBT,RDC)
3	PhD thesis submission	1 (PRK)
4	Synopsis submission	-

Sr. No	Department	Name of Teacher Faculties/CHBs	No of Research papers published in journals (National/International)
1	Micro-biology	Dr. V.D. Nanoty	6
2		Dr. U.K. Bhalekar	5
3		Dr. Y.A. Ali	4
4	Chemistry	Dr. P.P. Deohate	25
5		Dr P.T. Agrawal	14
6		P.R. Kawle	6
7	Botany	P.M. Khadse	1
8		Dr. A. G. Thakre	1
9	Physics	P.P.Gedam	1

10	Zoology	Dr.S.M. Nagrale	3
11		Dr.A.H. Amaley	6
12		Dr.S.R. Kohchale	5
13	Electronics	R.D.Chaudhari	5
14	Mathematics	Dr. S.M.Padhye	8
15		Dr. S.W. Bhaware	6
16		S.B. Tadam	2
17	Library	M. R. Ubale	1
	<b>Total</b>		<b>95</b>

Participation of students in research events and achievement.

Achievements	2014-15*	2010-11 to 2013-14
No. of students selected for national level research festival - Anvention	2	0
No. of colour coats awarded by Sant Gadge Baba Amravati University, Amravati to the students participated in state level research festival - Avishkar	5	6
No. of students participated in university level research festival - Avishkar	6	11

Research Projects	Status	Number	Grant utilized/sanctioned
Minor research projects	Completed	4	Rs. 3,60,000/-
	Ongoing	6	Rs. 11,20,000/-
Major research projects	Ongoing	1	Rs. 9,79,800/-

College has received fund from the UGC for research work under basic research grant and under additional assistance this adds to over all development and contribution in research work of college.

**Community engagements:** following community engagement programmes run by college

**National Service Scheme (NSS):** Shri R. L. T. college of Science, has always tried to keep social justice with the society under guidance of Principal of college, with the cooperation of The Berar General Education Society and with the co-operation of Amravati University, college conducts various activities. Presently **Dr. S. R. Kohchale Dr. Anjali Thakare and Dr. Ashish Sarap** are working as programme officers.

With the tries of Following activities/programmes are run by NSS unit in session 2013-14.

## **1. Regular Programme**

- a) 10 June 2013- Guest lecture on how to increase memory power.
- b) 6 August 2013- Advisory meeting of NSS
- c) 7 August 2013- Inauguration of N.S.S. unit
- d) 9 August 2013 – Krantidin
- e) 15 August - Independence day celebration
- f) 20 August 2013 – Late Rajiv Gandhi Jayanti.
- g) 5 September 2013 – Teachers day celebration
- h) 6 September 2013 – Competition on “Narendra Dabholkar’s view” on international literacy day
- i) 24 September 2013 – NSS foundation day
- j) 2 October –Mahatma Gandhi and Lal Bahadur Shastri Birth Anniversary.
- k) 1-12-13 to 7-12-13 – AIDS awareness week (red ribbon club).
- l) 24 December 2013 – Blood donation camp.
- m) 3 January 2014 – Savitribai Fule Jayanti.
- n) 12 January – Birth anniversary of Swami Vivekananda.
- o) 26 January 2014 – Republic day Celebration
- p) 5 February 2014 – Workshop on AIDS awareness
- q) 24 march – Valedictory function of NSS.

## **2. Special Residential Camp – (26/12/13 to 02/01/14)**

- a) 26-12-13 - Students arrival at camp place /discussion with villagers.
- b) 27-12-13 - Inauguration, Bhajan Sandhya on “ Gadge Baba’s Dashsutri”
- c) 28-12-13 - Lecture on “Varadi Katha Kathan” awareness through Kirtan By Kute Maharaj.
- d) 29-12-13 - Lecture on “Environment Protection need of today” by Rajaram Mhatre, Lecture on “Personality Development” by Vivek Hivre.
- e) 30-12-13 - Sickle cell anaemia checks camp for villagers and lecture on sickle cell anaemia by Dr. Dilip Sarate.
- f) 31-12-13 - “Lecture on Vidnyan and Adhyatma”
- g) 01-01-14 – lecture on “Women empowerment programme, and free seed distribution by “Shrushti vaibhav”, Guidance on legal rights by Judges of session court.
- h) 02-01-14 – distribution of school material and sport material to school children of adopted village.

S.N.	Year	Achievement	Name of Students
1.	2012-13	National R. D. Parade, New Delhi. Participation in National camp at Tejpur, Assam. State level R. D. Parade, Marine Drive, Mumbai.	1. Urja Shah 2. Arti dahibhate 3. Amol Deshpande
2.	2013-14	Participation in State Disaster management camp, and won prize in Univerity group.(Avhan-2014)	1. Diguijay Borde 2. Soniya Nagre
3.	2014-15	Participation in Bhartiya Chhatra Sansad. At Pune.	3. Akshay B. Rathod

S. N.	YEAR	Adopted village	duration	No. of students participated
1	2010-11	Somthana	22/10/10 to 29/10/10	100
2	2011-12	Yelwan	26/12/11 to 02/01/12	100
3	2012-13	Yelwan	28/12/12 to 04/01/13	100
4	2013-14	Yelwan	26/12/13 to 02/01/14	100
5	2014-15	Sonala	02/01/15 to 09/01/15	100

- Dr. P. P. Deohate got award of appreciation by the hands of Vice chancellor S.G.B.A.U. Amravati in 2010-11.
- Dr. S. R. Kohchale got felicitated by Dean Govt. Medical College, Akola (2013-14 and 2014-15).

**National Cadet Corp (NCC):** NCC is a member of youth organization this is purely voluntary organization and is largest youth organization in the world in our education system. NCC has its unique importance. NCC unit provide following help to create social awareness discipline and Unity in students. Programs are run by NCC unit under 11 Maharashtra Batalian NCC Akola. During the last four years (2010-11 to 2014-15) NCC unit of our college participated in various programmes organized by central government of India. The aim of NCC is to develop character, Comradeship, services and the capacity for leadership in growing men and women. It helps to provide services, training young men and women so as to stimulate the interest in the defense of the country and to build up resource of man power to enable the armed forces to expand in the national emergency. Cadets of NCC participate in following activity.

**\*Camp** (Annual Training Camp, Army Attachment Camp, Republic Day Camp, National Integration Camp, Parasailing Camp, Tracking Camp, and Many Social Awareness Camps Like, (AIDS Awareness Camp, Tree Plantation, Human Rights Day, Youth Day, Polio Vaccination Camp, Anti Dowry Campaign, Adult Education Programme, Womens Empowerment Programme etc.)

NCC Care takers are 1. Shri. R. D. Chodhari 2. Shri P. P. Gedam

Table showing participation of NCC cadets in various camps.

S. N.	Camp	2010-11	2011-12	2012-13	2013-14	2014-15
1	ATC	10	10	8	18	1
2	AATC	10	5	-	9	15
3	RD CAMP	1	1	1	-	1
4	TSC	1	-	1	-	-
5	YEP	-	1	-	1	-
6	BLOOD DONATION	4	3	2	3	2
7	B CERT	26	12	13	2	9
8	C-CERT	6	5	6	7	1

#### **Achievement in last four years**

S.N.	Year	Achievement	Name of Students
1.	2010-11	Republic Parade at Rajpath Delhi	A. A. Jagmohan
2.	2011-12	Pre- Republic day Parade,	Amol Deshpande
3.	2012-13	TSC, camp Delhi Republic Parade at Rajpath Delhi	Akshay Shrivastava Mohinder Arora
4.	2013-14	Youth Exchange Programme, Singapore (Malasiya).	Mohinder Arora

**Department of Physical Education:** It is one of the premiere department putting all efforts for the welfare of society creating opportunities and educating the students of poor background, physical education department aims to provide physical fitness training to young generation and job opportunity through sports certificate for needy and poor people of society. During last four years students of sports participated in various tournaments and cultural programmes organized by S. G. B. Amravati University, Amravati.

#### **Extension work & Community Development – Physical Fitness Centre & Coaching in Judo, Wrestling, Boxing**

**Session 2010-2011**

**Inter School Tournaments Participation**

Event	District Level	Division Level	State Level	National Level
Wrestling	12	07	01	--
Boxing	03	01	---	----
Judo	16	12	08	03
Total	31	20	09	03

**Inter Collegiate Tournaments of S.G.B. Amravati University, Amravati**

Event	No. of Participants	Position		
		I	II	III
Wrestling	09	--	03	01
Boxing	04	--	--	--
Judo	09	01	02	02
Total	24	01	05	03

**Session 2011-2012**

**Inter Collegiate Tournaments of S.G.B. Amravati University,**

Event	No. of Participants	Position		
		I	II	III
Wrestling	08	02	01	00
Boxing	05	--	01	01
Judo	12	00	01	07
Total	25	02	03	08

**Inter School Tournaments participation**

Event	District Level	Division Level	State Level	National Level
Wrestling	15	09	04	---
Boxing	09	----	---	---
Judo	23	18	11	02
Total	47	27	15	02

**Achievement Detail-**

1. Ku. Dhanashri Sone Colour in Wrestling.
2. Ku.Renuka Paraskar, Silver Medal in **School Judo National Games.**
3. Akshay Tiwari participated in **School Judo National Games**

4. Ku. Priyanka Gawali Two times Silver medal in State Level School & Open Wrestling Tournament.
5. Vishal Chorpagar Two times Silver in State Level Judo Open Sr. Tournament & University Level Judo Tournament.
6. Ankit Tiwari, Pankay Yamgawali, Ku. Kanchan Wagh – Silver Medal In School State Judo Tournament.
7. Ku. Durga Ambhore & Harish Pawar Bronze medal in School level State wrestling & Judo Tournament.

**Session 2012-2013**

**Inter Collegiate Tournaments of S.G.B. Amravati University,**

Event	No. of Participants	Position		
		I	II	III
Wrestling	12	02	01	00
Boxing	10	03	01	01
Judo	12	01	03	02
<b>Total</b>	<b>34</b>	<b>06</b>	<b>05</b>	<b>03</b>

**Inter School Tournaments**

Event	District Level	Division Level	State Level	National Level
Wrestling	12	04	02	---
Judo	21	18	06	02
<b>Total</b>	<b>33</b>	<b>22</b>	<b>08</b>	<b>02</b>

**Achievement Detail-**

- A. Colour in Judo - Ankit Tiwari
- B. Colour in Wrestling - Ku. Priyanka Gawali, Rajat Gawali
- C. Inter Collegiate Judo Tournament of S.G.B.A.U.  
Silver Medal - Ku. Renuka Paraskar, Ku. Priyanka Gawali, Rajat  
Gawali,  
Bronze Medal - Ku. Rupali Dudhade
- D. School Level Tournament  
National Level Tournament – Shoheb Chavan Bronze Medal  
State Level - Ku.Nikita Ambuskar (Gold), Akshay Tiwari (Silver)  
Durgesh Tiwari (Bronze),
- E. Open State Tournament Ku. Priyanka Gawali, Judo (Gold),  
Ku.Kanchan Wagh, Wrestling (Bronze)

**Session 2013-2014**

**Inter Collegiate Tournaments of S.G.B. Amravati University,**



Event	No. of Participants	Position		
		I	II	III
Wrestling	08	02	01	00
Boxing	06	00	00	01
Judo	10	03	04	00
<b>Total</b>	<b>24</b>	<b>05</b>	<b>05</b>	<b>01</b>

**Inter School Tournaments**

Event	District Level	Division Level	State Level	National Level
Wrestling	14	08	00	00
Judo	16	12	06	00
<b>Total</b>	<b>30</b>	<b>22</b>	<b>08</b>	<b>00</b>

**Achievement Detail-**

F. Colour in Judo - Ankit Tiwari, Ku. Priyanka  
Gawali, Shoheb

Chouhan,

G. Colour in Wrestling - Ku. Priynaka Gawali,  
Parmeshwar Yamgawali

H. Inter Collegiate Judo Tournament of S.G.B.A.U.

Silver Medal - Ku. Renuka Paraskar, Vishal  
Chourpagar,

I. School Level Tournament

Judo State Level - Akshay Tiwari (Silver),

Devashish Bagade ( Silver)

Durgesh Tiwari (Bronze),

Sanjana Yadav (Bronze)

J. Open State Tournament

Ku.Kanchan Wagh, Wrestling (Bronze), Akshay Tiwari, Judo  
(Silver),

Shoheb Chouhan, Judo (Bronze),

**Human Resource Management:** Human resource management is a very sensitive area where the college adheres to the Principal of discipline but with a warm human touch. The administration has developed mechanism to watch each and every employed closely and at the same time it take care to keep him/her at a comfort level so that he/she could work sincerely/punctually and efficiently to the maximum of his/her capacity. The various members of faculty get useful administrative experience and a sense of meaningful involvement in decision making process.

**Industry interaction:** The College organizes visits to industries, fields to facilitate the student to work on their project. The carrier guidance cell along with various departments of the college remains on its toes to develop ties with the industry at local, regional and national level. It provides significant information to the experts regarding what should be incorporated in the courses of the college to meet the demands of the industry. Further the academic gains are shared with industry by way of consultancy. College has signed memorandum of understanding with various agencies Microbiology, with five, Chemistry with 3 and Botany with One MOU.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

1. Every year on the occasion of foundation day i, e on Makar Sankranti, Principal reads and convey the progress report of institution to management, all faculty members and administrative staff of different colleges of the Berar General Education Society.
2. As per rule of Maharashtra University act to monitor the academic and financial administration of college we have Local Managing Committee the academic and administrative policies of college are monitored by LMC under Chairmanship of Chairman, Principal and representative of teaching and administrative staff.
3. Parent teachers association conducts meetings and provides information to parents about various schemes run by college for welfare of students.
4. Alumni association arranges guest lecturers for students
5. Each year college Magazine *Pratibimb* is published which highlight all activities and programmes of college and which is also provided to all stakeholders.
6. all information regarding institution and institutional activities are available in Prospectus, updated on website day to day and published in news papers.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

Management helps to the staff in all aspect of development as follows.

1. For research purpose, management provides financial assistance.

2. Management provides fund to staff members for attending conferences/Seminars/workshop/Symposia.
3. Management inspires staff members for minor and major research projects.
4. For each new achievement, staff members are felicitated by management.
5. Management provides festival advance to non teaching staff members (Dasera and Diwali).
6. Management provides Uniform to office staff (Peon and delivisiousStaff).

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

Local Managing Committee is the statutory body formed as per the Maharashtra Universities act 1994. The LMC comprises of elected representatives of teaching and non teaching staff, chairman secretary and representative of management and experts from various fields, this committee can make recommendation for the improvement an up gradation of existing academic and extracurricular activities It also prepares the budget and financial statements. As far as local managing committee is concerned, every year in the month of February tentative budget for next financial year is placed by principal in the meeting. After that discussion is held on it and then it is passed unanimously. Regarding the review of construction work in the college, Principal inform to managing council about the status of infrastructure and takes the permission for construction work. During the last five years several developmental facility made in infrastructure i, e renovation and construction work. During the last five years, following meetings were conducted.

S. N.	Session	Date of Meeting
1	2010-11	26/05/10,16/09/10 and 25/02/11
2	2011-12	26/07/11, 05/08/11 and 28/02/12
3	2012-13	27/07/12 and 04/02/13
4	2013-14	25/07/13, 24/01/14 and 26/03/14
5	2014-15	24/07/14, 12/11/14 and 13/02/15

**Resolutions made by management in last four years are given below.**

S. N.	Session	Date of Meeting	Resolutions made
1	2013-14 And 2014-15	04/02/13	1. Tentative budget 2. Review of construction work 3. Time bound promotion to retired persons.
		25/07/13	1. Review of construction work 2. Information about Clock Hour Basis Lecturers

24/01/14	<ol style="list-style-type: none"> <li>1. Review of construction work</li> <li>2. Tentative budget of session 2014-15</li> <li>3. Interviews of Asst. Professors</li> </ol>
26/03/14	<ol style="list-style-type: none"> <li>1. Tentative budget for session 2014-15 and review of</li> <li>2. construction work</li> </ol>
24/07/14	<ol style="list-style-type: none"> <li>1. review of construction work</li> <li>2. information of CHB lecturers</li> <li>3. IQAC work</li> </ol>
12/11/2014	<ol style="list-style-type: none"> <li>1. NAAC reaccrreditation of college</li> <li>2. Review of construction work</li> </ol>
13/02/15	<ol style="list-style-type: none"> <li>1. Tentative budget</li> <li>2. RAR submission</li> <li>3. Review of construction work.</li> </ol>

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?**

Yes, there is a provision but most of the affiliated colleges of SGBAU are still not in a state to get autonomy with the issues like salaries and curricular aspects. As most of the students studying are from rural areas and from poor background thus they can't afford fees there fore college are not opting for autonomy.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?**

**Grievance committee/Code of conduct committee:**

The institute has well-defined grievance Redressal mechanism to address and redress the grievances of all the members. A Grievance Redressal Cell has been established to address the problems of the students and staff and promote a healthy atmosphere in the college.

Principal is the chairperson of the committee. Suggestion/Complaint boxes have been installed in the college campus and hostel in which students put in writing their grievances. Prompt and effective disposal of grievances of various stakeholders is being done by the Grievances Redressal Committee under the guidance of the Principal. The cell finds solutions for problems like, harassment-physical or mental, complaints regarding classroom teaching, grievances relating to hostel and administration. The complaints are aggregated under different heads like, Problems of hostel, classrooms teaching

etc. The complaints are analyzed and are resolved after consultation with the members of the committee. The suggestions/solutions are used for promoting healthy stakeholder relationship.

**Redressal of Staff Grievances:**

The Principal is accessible to all the members for sharing their grievances and concerns. Faculty members are free to express their complaints and problems privately. The Non-Teaching Staff bring their grievances to the officers of the college. Grievance against a colleague/HoD/ Officer expressed by a staff is referred to the Principal for appropriate Redressal.

**Redressal of Student Grievances:**

There is a Grievance Cell to look into the grievances of the students. Grievance/suggestion boxes are placed at strategic locations. Student grievances related to academics are dealt with at the department level by the lecturers / members of Grievance Redressal Committee.

**Redressal of Resident Scholars Grievances:** Through the wardens grievances of resident scholars are submitted to the head of the institution who directly or in consultation with warden and if necessary resident scholars themselves find timely solution for pending grievances.

**Redressal of Parents 'Grievances:**

Direct and timely access to the head of the institution for voicing grievances if any by parents are resolved through personal interaction by the head of the institution or Redressal cell.

**Teacher Guardian association:** teacher guardian association interacts regularly with teachers to find out the academic performance of students also deals with the complaints and problems and resolves promptly to maintain better stakeholder relationship. These committees help to maintain positive environment and solving problems of students and staff members.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

Nil.

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?**

Yes.

College values the feedback and demand of students substantially after analyzing the feedback college takes steps for better performance. To

enhance overall performance of student following facilities created for the students.

1. On demand of students canteen is made available to students for getting good food.
2. Separate study room in library is made available for students.
3. As per suggestion, students/SRC are introduced while planning and executing academic and other activities.

### **6.3 Faculty Empowerment Strategies**

#### **6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?**

1. Honesty, Sincerity, devotion in work of staff members is appreciated by felicitating deserving staff by principal and management.
2. For the up gradation of skill and knowledge teachers of college are permitted to attend orientation refresher courses, workshop, and conferences regularly
3. Teachers of college are felicitated every year on 26<sup>th</sup> January for their outstanding work and special achievements
4. E- learning programmes to all staff members are regularly organized.
5. Salary earners society of teaching and non teaching staff is operative in college to provide financial support.
6. Group insurance facility is provided to all faculty members (teaching and administrative staff.)
7. For administrative staff master software training were conducted.

#### **6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

1. College organizes many skill oriented programmes for faculty members
2. Awareness programmes on legal ethical issues are organized by college (legal rights. Human rights etc.)
3. Co-operative store in college makes the food grains available at reasonable rate.
4. Salary earners society provides emergency loans of Rs. 20,000.
5. All the available infrastructure facilities like college laboratories, library facilities, computers and internet access are freely available for faculty members.
6. College allows teachers and administrative staff to attend orientation programme, refresher programme, and skill oriented programmes.

#### **6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

1. As per the norms of UGC, Academic Performance Indicator (API) committee is found to evaluate the performance of faculty in teaching, research and extension programmes, at the end of session all teachers submit API to chairman of API committee.

2. Self appraisal/API by teaching staff is mandatory. The form requires that the teacher should give his/her self evaluation of the academic, co-curricular work done during the year.
3. It also requires the teacher to enumerate the papers presented at conference, seminars, refresher courses and orientation programmes he/she has attended.
4. Every teacher reports to H. O. D. regarding the duties performed by him with respect to lectures completed as per teachers planned lecture schedule and lectures completed taken by him. This helps in analyzing the daily performance of teacher
5. Self appraisal proforma of laboratory assistant is also submitted to HOD of respective subjects.
6. Committee evaluates the performance and if needed due suggestion is given to concerned faculty.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

1. Principal, on the basis of good performance of the faculty appreciates it and then pursues the other faculty members to follow such things in the interest of the institution and self development.
2. Management and Principal analyses performance reports and considering merits and demerits certain decisions are taken and one informed to concerned stakeholders.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

1. Group Insurance scheme for all permanent teaching and non teaching staff.
2. Consumer cooperative store facility is available to students and staff members.
3. Shri R. L. T. College salary earners credit cooperative society gives loan to the permanent staff members of the college. This society is given A grade by the auditor.
4. Medical reimbursement scheme for staff members is followed in the college.
5. Financial help is given to the faculty members engaged in research activity.
6. Concession in tuition fees is given to children of permanent staff.
7. Refundable /non refundable facility of loan is given to the permanent staff members.
8. Deduction of LIC premium and GIC premium, DCPS from monthly salary is followed in the college.
9. All staff members take the facilities explained above.

**6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

1. Management and institution creates healthy atmosphere for faculties and appreciates them of work, it help in providing facility for research giving regular salary payments is also one of the strategies for retaining the faculty and other staff.
2. Management and Principal support eminent faculty for extension of services as per Maharashtra government rule.

**6.4 Financial Management and Resource Mobilization**

**6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

1. To complete the need of college, college applies for the grants under UGC schemes for building/infrastructures/instruments/chemicals/glasswares/internet etc.
2. Proper procedure of purchase is adopted; college has a purchase committee under chairmen ship of Principal to monitor effectively and efficiently.
3. Tenders and quotations are invited and are compared.
4. Regular audit carried out by Chartered Accountant with appointment by management.
5. UGC grants are utilized under the observation of Head of the department and Principal. Up to purchase of rs. 50,000 quotations are called, compared and for the purchase of above rs 50,000/ tender notices are issued. Purchase committee takes the decision on all aspects of issue of purchase; utilization of money is certified by chartered accountant.

**6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

1. Institution conducts regular audit appointed by management through Chartered Accountant. Chartered accountant checks and verifies the stock book visiting each department.
2. Auditor general of government of Maharashtra conducts audit per year/3 years Similarly Joint Director Higher Education, Amravati division also carries audit frequently.
3. Last audit was conducted on **25 September 2014**.  
No major objections are raised by auditor yet.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and**



**expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

1. College is aided, 1. Salary grant received from the government,
2. Since college is 2F and 12B, college applies for various schemes to UGC and UGC sanction the schemes. UGC schemes like a) General Development Grant, XI th and XII th plan. B) Merged Scheme c) Major/Minor research projects d) Basic Scientific research Grant e) Hostel Grant.
3. Fees/Dues from students are major sources of institutional receipts
4. Deficit is managed by funding from management.

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

1. Ex. Professor of Botany Shri K. B. Sharma 1 lakh rs. to society and management utilized which is to be fund for infrastructure purpose.
2. Alumni give the donation in the form of fixed deposit to the society, interest of such deposit used for award of prize.
2. College provides class rooms for UPSC/MPSC/Banking examination on rental basis.
3. College has self financing courses such as B.Sc. with IT/Biochemistry/Bioinformatics/CCLT/DCLT/ADCLT as well as PG courses in Microbiology/Chemistry Resources generated under these items are utilized to cover the deficient if any.

**6.5 Internal Quality Assurance System (IQAS)**

**6.5.1 A) Has the institution established an Internal Quality Assurance Cell (IQAC)? .6 If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Ans: Yes, as per the guidelines of NAAC the IQAC is established to monitor and fulfill all aims and objectives with respect to vision and mission of the institution. IQAC also takes care of all aspects of development of all components in college. The IQAC has very effective internal co-ordination and monitoring mechanism. The IQAC coordinator takes initiative to ensure effective coordination between and among the functionaries of the institution. On the basis of various policies adopted by the institution, objectives are laid down, plans are made and a regular follow up is maintained. This encourages greater support and coordination. IQAC is consists of Co-ordinator, all head of the departments and two members from the management.

Following issues are considered by IQAC

1. Every year IQAC coordinator send the AQAR to NAAC Bangalore.
2. Recently UGC released grant of rs. 3 lakh for IQAC cell of College. This money is to be utilized for Honorarium, IQAC Infra structure, conduction of seminar and workshop(This year seminar was organized

on 28/01/15 and Dr. Pramod Pabrekar Vice Principal, Vaze College, Mumbai was invited as speaker More than 100 participants participated from various institutions).

3. IQAC monitors students and staff requirement in terms of teaching and learning.
4. IQAC also monitors various welfare schemes for students and staff (like, Remedial, scholarship programmes, Equal opportunity Centre etc.)
5. Subject courses are introduced as per demand of time.
6. Various infrastructural development are made.
7. Workshops/Seminar/Symposia/conferences proposals and research projects are sent.
8. IQAC also arranges awareness programmes, strategies for further improvement in sports academics, cultural activities and special programmes to introduce values and patriotism in youth.
9. On the basis of guidelines setup by NAAC, IQAC helps institution to co-ordinate and monitor various activities.

**B) How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**

Following decisions taken by IQAC have been approved by management.

1. Introduction of course like, M. Sc. (Microbiology, Chemistry) and U.G. Courses like B. Sc. IT, Bioinformatics.
2. Establishment Gymnasium, sports infrastructure under UGC scheme.
3. Construction of new women's hostel funded by UGC.
5. Installation of smart room
6. Renovation of auditorium hall
7. In LMC meeting which was held on 13/02/15 management has sanctioned additional toilets, wash rooms room, tspecially for girls and boys as per recommendation of IQAC.

**c) Does the IQAC have external members on its committee?**

**If so, mention any significant contribution made by them.**

Yes, institution has two external members namely 1) Shri. Avinash Ukhalkar is presently working as a officer in central bank of India, RLT extension counter. He is a very co-operative and always helping during the collection of fees of students in bank by opening extra counter in the branch similarly he is actively involved in alumni programme.

2) Shri Mukundaji Joshi, presently he is executive member of the Society, he is a ex-student of college he attends many programmes of the college and

because of his helping nature he guides staff and students for improvement of quality. He also actively involved in alumni programmes, he is a dynamic, enthusiastic person who formerly worked in a pharmaceuticals company.

**D) How do students and alumni contribute to the effective functioning of the IQAC?**

1. Alumni are involved in college functions to motivate students.
2. Alumni provide suggestions to improve teaching and learning, exam system and day to day facility.
3. Institute makes special efforts to involve the alumni in all college progress.
4. Students are attending the functions organized by IQAC.

**E) How does the IQAC communicate and engage staff from different constituents of the institution?**

Institution has very effective internal co-ordination and monitoring mechanism.

Principal of college takes initiative to ensure effective co-ordination between and among the beneficiaries of institution on the basis of various policies adopted by institution. Objectives are laid down plans are made and regular follow up is maintained there by encouraging greater support and co-ordination.

**6.5.2. Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.**

Yes,

The institution is divided into various components like academics, sports, cultural and administrative objectives which are further divided into many sub-compartments.

College and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning.

- **Internal assessment marks** - The internal assessment marks are allotted to the students on the basis of their performance in class test examinations participation in seminars, group discussions, submission assignments, projects, dissertations, participation in study tours and industrial visits etc.
- **Assessment on the basis of co-curricular and extra-curricular activities** - The assessment of students' performance is also done on the basis of co-curricular and extra-curricular activities. The weightage to different aspects of learning such as regularity, class attendance, individual thinking, verbal questioning, behavioral aspects, independent learning, communication skill, surprise test, objective test, cultural events, games and sports etc. is given. Monthly attendance record leads to the regularity of students in classes incentive marks are

given to students by S. G. B. Amravati University, for participation in NSS/NCC/Sports/youth festival etc.

- **Corrective measures and planning of strategies** - The assessment outcomes are indicators of student performance and if number of underperforming students is large the huge corrective measures are applied after discussion in meetings and planning some strategies. For example if repeatedly the particular subject results are not satisfactory, then additional classes, tutorials are recommended to concerned faculty. Remedial classes are conducted for slow learners, these classes are funded by UGC.

- **Examples**

- **National scholarship "INSPIRE"** - The college students with high academic performance; Ms. Ankita Kabra, Ms. Manju Pariyani, Ms. Farheen Maniyar, Mr. Avinash Khanderao and Mr. Dnyaneshwar Thombare are recommended to apply for national scholarship like 'INSPIRE' and now these students are getting the scholarship of Rs. 4,00,000/- for the period of 5 years.

- **Research fellowship** - Ms. Kalpana Palaspagar and Ms. Priti Sharma are registered for the Ph.D. and are getting the fellowship of Rs. 16,000/- and 14,000/- per month respectively.

- **Research festival "Avishkar" and "Anvention"** - The students performing well in their academics are encouraged to participate in research festival "Avishkar" and they received the awards at university and state level. Two students are selected for national level research festival "Anvention"

- **Color coats in sport activities** - On the basis of assessment, the students are recommended for participation in games and sports then they achieve the colour coats of university and they represents the college at national level. For quality enhancement of teaching and non teaching staff college organizes achievement day on 26<sup>th</sup> of January every year in which staff members are felicitated for their quality performance during the past year.

**6.5.3. Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.**

1. Training is provided to the teaching as well as the administrative staff. Each department is equipped with the latest academic infrastructure and is trained to use it to achieve the desired goal.

2. The administration encourages and supports individuals as well as department for training.
3. E-learning programme is provided through short term courses to the non teaching staff (E-learning computer skill, writing skill, and software masters skill.).
4. For development of Skill, college holds workshops like **say to YES (art of living.)** to train the staff.
5. Administrative staff from the office is trained by giving them training about master software installed for automation of college.
6. Modern techniques are adopted by college to accept challenges.

**6.5. 4. Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?**

Yes, for the academic excellence IQAC conducts academic audit of the faculty and due suggestions are given for the improvement if needed.

1. Academic audit is conducted by analyzing results of class test, departmental tests, college prelim exam and university exams
2. Academic audit is informally carried out by using following procedure.
  - a) Head of the department takes the review in departmental meetings and conducts discussion.
  - b) Principal also takes the review on academic audit in meeting of staff council after declaration result of class test/unit test/and university examination.
  - c) Management reviews the academics in its regular meeting
3. In terms of general inspections university also does academic audit which introducing new courses.
4. All these aspects related to audit are helpful in improving institutional strength and performance.
5. Students evaluate the teachers, at the end of session. Teacher evaluation committee provides feedback forms to the students and as per feedback of students teachers are given suggestion if needed

**6.5.5. How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

1. As per guidelines of NAAC, IQAC tries to enhance quality in all areas of teaching and learning process
2. College follows all rules and regulations of UGC. College also follows all university rules
3. College tries to maintain all standards in teaching and learning process
4. College avails many welfare schemes offered by UGC.

**6.5.6. What institutional mechanisms are in place to continuously**

**review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

1. IQAC holds regular meetings in whole session to discuss methodologies to review teaching and learning process
2. IQAC introduces a sense of responsibility in all faculty members through principals and teachers interactions.
3. It Provides opportunities to students by managing many events (Science Exhibition. Participation in Avishkar festival and various competitions)  
Numbers of measures are taken by the IQAC to monitor and evaluate the quality of teaching and learning.

- **Academic calendar and time-table** -The academic calendar and time-table are prepared well before the start of the session every year.

- **Monitoring of classes, attendance of students and other academic activities** - The classes are regularly engaged by faculty members and monitored by the Principal and Heads of respective departments. The classroom attendance of students is closely monitored. The class test examinations, assignments, seminars, group discussions etc. are conducted at regular intervals.

- **Evaluation** - The performance of students is monitored and evaluated through internal assessment, classroom interactions and the performance in various curricular, co-curricular and extra-curricular activities.

- The evaluation of academic progress is done by taking a review of the results and the achievements of students in departmental as well as staff council meetings.

- **Review of teachers' performance** - The review of teachers' performance in terms of results and achievements of students is also taken twice a year.

- As per the UGC and university norms, the college collects self appraisal report of teachers every year as a part of performance based appraisal system (PBAS).

- The feedback from stake holders is taken and suggestions are implemented.

The college has the practice of evaluation of teachers by the students.

- **Feedback from students** - The College carries out the evaluation of teachers on the basis of the feedback obtained from the students at

the end of session through elaborately prepared questionnaire based on 5 point scale i.e. excellent, very good, good, average and below average.

- **Analysis by teachers' evaluation committee** - The teachers' evaluation committee carefully analyzes the feedback and the results of analysis are communicated to the teachers through the Principal.
- **Advice and suggestions** - If the feedback is not satisfactory, the Principal holds discussion with the concerned teachers and advice is given to overcome the weaknesses for improving the teaching. The teachers get constructive suggestions about their teaching style, participative teaching-learning, use of innovative methods for teaching etc. through the feedback, which help them to improve the quality of teaching.

The evaluation of teachers by the external peers is also worked out in the college.

- **Evaluation by academic peers** - The College collects the information from teachers about their academic activities and performance in prescribed proforma at the end of session. It is then put forth before the external academic peers appointed by the college.
- **Evaluation by screening/selection committee** - At the time of promotion of teachers to higher grade and scale the evaluation of teachers by the external Peers is done. As per the UGC and university norms, the college collects self appraisal report of teachers every year as a part of performance based appraisal system (PBAS), which are evaluated by the screening/selection committee and used for the promotion of teachers.
- **Evaluation by management members, guest faculty and subject experts** - The executive members of the management, guest faculty and the experts in various subjects while visiting the college interact with various stakeholders of the college, gather the information about academic performance of teachers and convey their opinions and remarks to the Principal, which are then forwarded to the teachers. This leads to an informal evaluation teachers by the external peers.

#### **6.5.7. How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

Institution communicates its quality assurance policies through following agencies

1. Parent teacher association - PTA conducts regular meetings with parents and discuss the policies and its implementation in college.
2. Alumni association – it helps to provide information to all stakeholders regarding all college activities.
3. Pratibimb – each year college produces college Magazine “*Pratibimb*” and provides as report to all stakeholders.
4. Events and achievements are published in news papers regularly and kept as record.
5. College website is updated day to day. Similarly prospectus also updated every year.
6. In college chairman of each committee submit the report each year at the end of session.

**Any other relevant information regarding Governance Leadership and Management which the college would like to include.**

**College strictly follows the given practices.**

1. **Biometry:** Biometry is meant for the attendance of the teaching and non teaching staff. Monthly review of attendance of staff is taken by the principal.
2. **Attendance register:** Attendance register is maintained and gets signed regularly by the faculty members and casual leave/duty leave/leave on duty/medical leave/earned leave/privilege leave/commutative leave is noted regularly.
3. **Uniform:** All teaching and non teaching staff has accepted uniform with identity card during college time. Also uniform and identity card are accepted by students of college.
4. **Birth and death Anniversaries:** college celebrates the birth anniversary and observes death anniversaries of National Heroes/ Freedom Fighters/social workers.
5. **MUNIJAN (Maharashtra Universities New Initiatives Joint Action Now):** first Saturday of month is a clean day of college, where all staff members are involved enthusiastically cleaning, the college premises and areas near by college. They also involve themselves in clean India campaign, in adopted village (Sonala).
6. **No Vehicle day:** no vehicle day is observed strictly by faculty



members and students of college on **1<sup>st</sup> and 15<sup>th</sup>** of month

7. **Paper less work:** notices and information's to each departments are circulated through E-mails/What's App, minimizing the use of paper.
8. **Praveshotsav:** this programme is conducted every year on the first day of B. Sc. I students in the college. Principal addresses the students and gave information about college functioning.

Due to the good co-ordination between the management, Principal, Teaching, Non teaching staff, students college has good reputation in the University and the Vidarbha region.

## **CRITERIA VII: Innovation and best practices**

### **7.1 Environment consciousness**

#### **7.1.1 Does the institutes conduct a green audit of its campus and facilities?**

Yes, Green audit of college campus is conducted by local non Government organization 'Shrustivaibhav'. Some important points of green audit are, Highlighted as-

1. Reduced electricity consumption due to installation of 'Solar water heater' in girl's hostel and 'Automatic solar based LED lights' in college campus.
2. Due to installation of 'Turbo-ventilators', consumption of electricity required by fans and air conditioners has been reduced to great extents.
3. Awareness campaign such as 'Switch it ON Switch it OFF', Eradication of plastic has brought positive change in thinking abilities of the students.

Attempts are being made to maintain eco friendly college campus. Old Big trees are taken care for fresh atmosphere in premises. Department of Botany takes care of botanical garden in which different varieties of plants have been cultivated without use of chemical pesticides and herbicides.

SGB Amravati University has introduced Environmental studies as a compulsory subject at graduation level, which could help to create awareness about various environmental issues and concern among the students.

#### **7.1.2 What are the initiatives taken by the college to make campus eco friendly?**

##### **\* Energy conservation:**

Following measures have been taken for saving energy.

1. Awareness is developed among staff and students to switch off electric Gadgets like light, fan, computer etc. when not required. NSS volunteers undertook campaign '**switch it ON Switch it OFF**' by displaying stickers near every electric board in college campus.
2. Roofs are treated for better energy conservation resulting into lesser use of air Conditioners.
3. Windows of office and some laboratories are covered by curtains to reduce heat conduction.
4. Main notice boards for students are kept in open space, which do not require Artificial Illumination.
5. Compact fluorescent lamps (CFL) have been installed in renovated classroom, laboratories, auditorium and girls hostel. But, it is found that cleanup and disposal of CFL bulbs is critical. Hence, institute is trying to replace CFL bulbs with LED which makes very nice lighting for effect and decorative purposes. LED bulbs are installed in Computer and Information Technology laboratories.
6. No vehicle day is observed on every 1<sup>st</sup> and 15<sup>st</sup> day of each month to

spread the message 'save petrol, reduce pollution and be healthy'.

7. Post Graduate student's projects of Chemistry department are converted to non conventional method i.e. by using microwave, so as L.P.G. consumption is reduced to great extent. Time required for the reaction is reduced from 6-7 hours gas heating by 5-10 minutes microwave reaction.
8. Infrastructure of college is architected and renovated in such a way that all classrooms and laboratories get maximum natural light and air, because of which use of electricity is avoided for maximum time of college working.

**\* Use of renewable energy:**

1. Solar water heater is installed in girl's hostel and college management is also planning to install solar panels to generate electricity for electrical gadgets.
2. B. Sc. III (Electronics) students have designed and implemented the project namely "Automatic solar based LED lights in college campus". This innovative practice of department of Electronics saves large amount of electricity consumed during night.
3. Each class room is having wide and open windows which provide good ventilation and proper natural light.
4. Turbo-ventilators are placed on the roof of auditorium and some class rooms (1, 2 and 3) for exhaust of gases.
5. Department of chemistry and life sciences uses rain water as distilled water after checking the conductance

**\* Water harvesting:**

1. Rain water from the roof of college building is channelized towards water harvesting pits which are constructed near auditorium hall and hostel.
2. Rain water percolate through open ground as well as pavers on the ground.
3. Use of rain water as distilled water in laboratory experiments saves the tremendous loss of water during distillation process.

**\* Check dam construction:**

Although this is not Applicable in college campus, check dams are constructed in adopted village by NSS volunteers.

**\* Efforts for carbon neutrality:**

1. Tree and green patches are maintained throughout the year. Also conservation of big trees has contributed to carbon neutrality in college campus.
2. Students and staff are encouraged to reduce carbon footprint by minimum use of automobiles.
3. Emphasis is given on minimizing use of all electrical gadgets in college.
4. Chemistry, Biochemistry and Microbiology laboratories are fitted with LPG cylinder to minimize carbon emission during practical session. In renovated Chemistry laboratories auto switch is fixed to control any leakage in gas

pipeline. Electric heating mantles are provided to post graduate students of chemistry to minimize the use of LPG.

**\* Plantation:**

1. On occasion of Independence Day, Department of Botany, NSS and NCC unit undertaken tree plantation programme every year to maintain eco-friendly and pleasant green campus. Majority of the plants in the campus are named and systematically characterized. In last three years college has planted about 40 medicinal, 52 ornamental and 62 shady plants in campus.
2. Saplings are gifted to students to make Akola city GREEN AND CLEAN.

**\* Hazardous waste management:**

1. NSS and NCC unit observe plastic eradication campaign in college campus and nearby area periodically and regularly, which is being sent for recycling via municipal corporation authority.
2. Eradication of *Parthenium* plant is a regular activity of NSS volunteers and NCC cadets.
3. Sufficient number of Dustbins are kept in every class room and in all the campus for deposition of hazardous waste. Every day after college hours, this garbage is collected in garbage bins. College made an agreement with Akola Municipal Corporation's 'Garbage pickup agency' to collect the waste material from garbage bins daily.
4. The wastage of chemistry lab is disposed in proper manner. Waste water mixed with chemical component is carried through underground drainage.
5. In Microbiology laboratory, hazardous waste bacterial pathogenic culture and culture media are treated with the disinfecting agent like dettol, lyzol and then it is disposed.
6. Paper cups are used in college canteen instead of plastic cups.

**\* E- waste management:**

1. Minor repair of gadgets are done by concerning laboratories staff and major repair is done by professional technicians.
2. Old configured computer sets are donated to schools run by Parent Society on request. Out dated computers and their accessories are exchanged with local supplier.
3. E- waste like empty toners, cartridges, and electric items are sold as scrap to local garbage dealer in order to ensure their safe recycling. Sometimes these items are given to students for designing projects like best from waste.

**7.2 Innovations:**

### **7.2.1 Give details of innovation introduced during the last four years which have created a positive impact on the functioning of the college.**

The college has made several innovations in academics, administration and other levels, which have helped to smooth out the functioning and working of the college. During last four years, following innovations have been introduced which have created a positive impact on functioning of college.

#### **1. Microcontroller Based Digital LED Notice Board-**

Students and staff of Electronics department designed and completed the project entitled “Microcontroller Based Digital LED Notice Board” under technical guidance of alumna of college Mr. Vijay Bhattad, managing director of Advanced micro devices, Akola.

This is a very advance project based on arm controller device. During construction of display board basic concepts like Encoder , Decoder, Scanning, Persistence of vision, Dot matrix display using LED (Light Emitting Diode), Microcontroller 8051, Scanning basics counter and microcontroller based softwares etc. are made clear to students. Thus, most of the important concept of electronics and designing are covered through this project.

This digital LED display is fixed at the main location of the college to attract attention of students and other members. Main events and notices are regularly displayed on it.

This is a low energy consuming device. By designing such low cost project, students can become able to get earning source. Students can start their self employment after graduation.

#### **2. Automatic solar based LED lights in college campus-**

As per the curriculum of SGB Amravati University, B.Sc. III Electronics (Instrumentation) students have to complete one project. Accordingly, these students have designed and implemented the project namely “Automatic solar based LED lights in college campus”.

In order to design above project, a solar panel and a dry cell battery required for charging and discharging are purchased. As a part of project, students designed Printed Circuit Board (PCB). Various components like IC regulated power supply; inverter and transformer are designed and assembled.

This project designed by the students have been used for the lightening of three LED lights which are installed in the college premises at the significant locations namely, in front of administrative office, cycle stand and girl’s hostel.

This green project is very much important as it contributes significantly by using one of the non conventional energy (solar) which is abundantly available in our region. Thus, it saves conventional energy. This is one of the innovative and best practices of department of Electronics as it saves large amount of electricity consumed during night. Also this green

project has developed environmental consciousness, scientific temper, technical skill and entrepreneurship among students.

### 3. Use of ICT-

**Biometric attendance** is introduced for teaching and non teaching staff.

**Use of audio visual teaching aids** - Each department is equipped with LCD projectors. As per the need of syllabus, topics are taught with power point presentations. As per UGC notification No. F. 14-6/2014(CPP-II) of 1<sup>st</sup> August 2014 dissections of live animals are banned. Hence, faculties of zoology department give audio visual demonstration of the animal dissections for providing hands on experience to their students. Thus this supports biodiversity conservation and ecological balance.

**Network Resource Center (NRC)**-College library is equipped with internet facility. Network Resource Center (NRC) of library provides internet facility for students and staff. The college has subscribed INFLIBNET facility for research scholars and faculty members.

**Virtual class room system** is installed in auditorium, Computer and Information Technology Departments. The demonstration of the system was conducted on Teacher's Day, 5<sup>th</sup> September 2014. Online demonstration of computer courses C<sup>+</sup> and C<sup>++</sup> was obtained on 30<sup>th</sup> January 2015.

**E- communications**- E- circular communications initiated by office section to minimize the use of paper. Master software is installed in administrative office computers, which are connected in LAN. This software is very useful in keeping official record of students and staff as well as fast generation of official documents like subject wise list of students, record of scholarships, Transfer certificates etc. Staff members are encouraged to prepare E-note. College wishes to provide E- books to reduce the use of hardcopies instead.

**CCTV cameras**- Exhaustive vigilance using 16 cameras at main locations of the college is made by head of the institution.

### 4. Student Centered Teaching-

**Remedial Coaching** for SC/ST/OBC and Minorities students is running very well under UGC Merged Scheme. Slow and fast learners are sorted out by each department. Remedial courses have become a regular feature to help the academically weak students. Students who have regularly gone through this course have shown considerable improvement in their academic performance.

**Challenging projects** are suggested to fast learners. They are encouraged to participate in co curricular activities like student's research festival Avishkar, seminar, project competitions, science exhibitions and conferences etc.

**Science Pundit competition**- To motivate scientific temper, Department of Zoology and Lokmat Yuva NXT jointly organizes a science project competition and exhibition 'Science Pundit' for student of school and colleges of Akola district every year on National Science day, 28<sup>th</sup> Feb. College students are encouraged for active participation and organization of this event.

**Sky Observation Club** of college generates curiosity and inspires young minds of our science students to contribute the understanding of world around us.

**14 hr. continuous study** is a regular project observed every year, for the students and staff on occasion of Dr. Babasaheb Ambedkar Jayanti (14<sup>th</sup> April), with intension to be on the path of progress.

Due to **Stand by generator** facility, there is no interruption in case of failure in supply of electricity while working on computers, practical, use of LCD and so on. UPS of computer dept. is with 16 backup batteries.

**Yearly diary** is provided to teaching staff to keep daily record of course taught as per syllabus and his/her involvement in various activities.

#### **5. Praveshotsav (Welcome to freshers ) –**

Newly admitted students are welcomed and are given orientation at the beginning of their course of study. Merit students of final year hand over the Mashal, as a symbol of knowledge to first year topper students. Honorable Principal and all faculty members give maximum representation to students. Information about sports, extension and social activities run by NCC, NSS and other departments of college is provided to students.

#### **6. Achievement Day-**

The achievements of students and staff members in various fields are regularly displayed on notice board as well as on college website. Republic day (26<sup>th</sup> January) is also celebrated as **Achievement Day**. A special programme is arranged to appreciate and felicitate the student achievers, who have won laurels for the college on the academic, sports and co-curricular front. Faculty achievements are also highlighted and honored to offer role models for the students to look up to and emulate.



# **INPUTS FROM DEPARTMENTS**

## Evaluative Report of the Department of Bio-Chemistry

1. Name of the department : BIOCHEMISTRY
2. Year of Establishment : UG 15/07/1997
3. Names of Programmes / Courses offered : UG

Programme	Courses	Duration
B.Sc.	B1(Biochemistry) Micro/Biochem/Chem	3 Years

4. Names of Interdisciplinary courses and the departments/units involved : Nil
5. Annual/ semester/choice based credit system (programme wise) :-

Programme	Annual/Semester/CBCS
B.Sc.	Semester

6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts

	Sanctioned	Filled
Professors	00	00
Associate Professors	00	00
Asst. Professors	00	00

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the
Ku. I.B.Soneji	M.Sc.PG.DC CA	CHB	Biochemistry	4	--
Ku.K.R. Damodar	M.Sc.BEd	CHB	Biochemistry	1	--
Ku.D.V .Deshmukh	M.Sc	CHB	Biochemistry	1	--

Dr. S. R. Kohchale	M.Sc. M. Phil. P.hD.	CHB	Zoology	6	--
Dr. H. S. Malpani	M.Sc. P.hD.	CHB	Microbiology	5	--
Mr. S R Mhatre	M.Sc.	CHB	Microbiology	1	--

### 11. List of senior visiting faculty

Sr. No.	Name of Senior Visiting	Designation	Name of college of Visiting Faculty	Year of experience
1	Dr. M. Musaddiq	Associate Professor	HOD, Department of Microbiology, Shri Shivaji College, Akola.	30 years
2	Dr. Archana S. Pethe	Associate Professor	Department of Microbiology, Shri Shivaji College, Akola.	29 years
3	Dr. Nikhilesh S. Kulkarni	Associate Professor	HOD, Department of Microbiology, R.A College, Washim.	16 years
4	Dr. A. R. Deshpande,	Associate Professor	HOD, Department of Microbiology, Shri Shankarlal Khandelwal College, Akola	16 years
5	Dr. D. S. Bhokare,	Associate Professor	Department of Microbiology, Shri Shankarlal Khandelwal College, Akola	15 years
6	Dr. Z. H. Khan,	Associate Professor	HOD, Department of Biochemistry, Shri Shivaji College, Akola.	30 years
7	Dr. Anil M. Garole	Professor	Department of Microbiology, Shri Shivaji College, Chikhali	29 years

### 12. Percentage of lectures delivered and practical classes handled (programme wise) By temporary faculty: UG - 100%

Name of Teacher	B.Sc I		B.Sc II		B.Sc III		Total
	Sem I/II	Pract	Sem III/IV	Pract	Sem V/VI	Pract	
Mr.Dr.S.R.Kohchle					2	6	8
Mr.Dr.H. S.Malpani			2				2
Miss.I.B.Soneji	2	6	2	6	1		17
Miss.P.P.Dole		6	2	6	1		15
Mr. S R Mhatre	2						2
Miss.D.V.Deshmukh	2					3	5
Miss.K.R.Damodar					2	3	5
<b>Total</b>	<b>6</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>54</b>

13. Student -Teacher Ratio (programme wise): UG 120:7 (17:1)

14. Number of academic support staff (technical) and administrative staff, sanctioned and filled: Sanctioned 1 and Filled: 01.

Sr. No.	Name	Designation	Year of Service
1	Shri S. S. Solanke	Lab Assistant	20
2	Daily wages (UG)	01	--

15. Qualifications of teaching faculty with Ph.D.: 02

Sr. No.	Name	Designation
1	Dr. S. R. Kohchale	(CHB)
2	Dr. H. S. Malpani	(CHB)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications:

a) Publication per faculty : Nil

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National committees: 02 Dr. V.D. Nanoty, Dr. U.K. Bhalekar

Association of Microbiologist of India (1368/2001)  
b) International Committees c) Editorial Boards....

Sr. No.	Name	committees	Year / Id. No.
1	Dr. U.K. Bhalekar (In-charge)	1) Association of Microbiologist of India  2) NUTA  3) Organizing Secretary  4) Coordinator	2001/1368 Life Membership  Life Membership  State Level Microbiology Students Workshop 2013( Swami Vivekanand)

## 22. Student projects

a) **Percentage of students who have done in-house projects including inter departmental/programme :** UG – 100 %.

Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: Nil

## 23. Awards / Recognitions received by faculty and students

Sr. No	Name of Awardees	Award	Year
1.	Ku. Ankita R. Kabra	Inspire (4,00,000)	2011-2012
2.	Ku. Manju. N. Pariyani	Inspire (4,00,000)	2011-2012
3.	Ku.Abhilasha Deshmukh, Ku. Rasika Udupure & Ku. Maithili Deshmukh	State Level Micro Quiz Competition (Second & Third Prize)	2012-13
4.	Ms. Abhilasha Deshmukh	Award of Excellency	2012-13
5.	Ku. Rasika Udupure, Ankita Sharma & Akshay Shriwas	Aviskar	2013-14

**24. List of eminent academicians and scientists / visitors to the**

<b>Sr. No</b>	<b>Name of academicians and scientists /visitors</b>	<b>Designation</b>	<b>Name of college of Visiting Faculty</b>
<b>1</b>	Dr. P. R. Thorat	Associate Professor & HOD.	P G. Dept of Microbiology & Research Centre, Shivaji College, Barshi
<b>2</b>	Dr. P. S. Wakte	Associate Professor & HOD.	Dept of Microbiology, Dnyanopasak College, Parbhani

**department**

3	Dr. A. M. Deshmukh	Professor & HOD.	Dept of Microbiology, BAMU, Aurangabad.
4	Dr. C. N. Khobragade	Associate Professor	S. R. T. M. University, Nanded.
5	Dr. C. S. Chandekar	HOD	Dept of Microbiology Shri Shivaji Science College, Nagpur
6	Dr. A. V. Manwar	Associate Professor	P.G Dept of Microbiology, DSM College, Parbhani
7	Dr. Kapil D. Kamble	Associate Professor	Dept of Microbiology, S. G. B. Amravati University Amravati
8	Dr. A. B. Ingle	Associate Professor	Dept of Microbiology, S.K. Porwal College Washim.

**25. Seminars/ Conferences/Workshops organized & the source of funding**

- a) National : Nil  
b) International : Nil

**26. Student profile programme/course wise: 2013-14**

Name of the Course/ programme	Applications received	Selected	Enrolled		Pass percentage
			M	F	
B.Sc I Sem I	222	40	3	37	55.00%
Sem II	--	39	3	37	69.23%
B.Sc II Sem III		39	3	36	38.46%
Sem IV		39	3	36	79.49%
B.Sc III Sem V		33	3	30	87.88%
Sem VI		33	3	30	84.85%

\*M = Male \*F = Female

**27. Diversity of Students**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad

B.Sc.I/II/III	100%	0%	%
---------------	------	----	---

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

29. Student progression

Student progression	Against % enrolled
UG to PG	30- 50 %
<b>Employed</b> • Campus selection	Nil
Entrepreneurship/Self-employment	20—30 %

30. Details of Infrastructural facilities

a) Library : Yes **Books and Journals (52)**

b) Internet facilities for Staff & Students : **YES**

c) Class rooms with ICT facility: **YES**

d) Laboratories **01**

Facility	Instrument	Rooms	Laboratories
Staff (Teaching Non-Teaching And CHB)	Desktop, Laptop, LCD Projector, Digital Camera, Internet Wi-Fi	Staff Room Non-Teaching Staff Room	<b>01</b>
Student	Desktop, Laptop, LCD Projector, Digital Camera, Internet Wi-Fi	UG 3 Rooms 1 Class room with ICT	<b>01</b>

31. Number of students receiving financial assistance from college, university, government or other agencies

Name	scholarship	Amount	Year
Ku. Ankita Kabra	Inspire	4,00,000/-	2011-2012
Ku. Manju Pariyani	Inspire	4,00,000/-	2011-2012
Ku.Abhilasha Deshmuk	Excellency Award	10,000/-	2013-2014

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts



**Workshop 01 ; Special lectures 04;**

<b>Sr. No</b>	<b>Workshop</b>	<b>Special Lecture</b>	<b>Educational tour</b>	<b>Project work</b>	<b>Industrial Visit</b>	<b>Year</b>
1	01	04	08	208 CCLT/DC LT/ADCL T	04	2011 - 2015

**33. Teaching methods adopted to improve student learning:**

- ICT
- Power Point
- Seminar
- Chart
- Instrument
- Remedial Coaching
- Virtual class room
- Extension work
- Project work

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- Science Exhibition
- Blood Donation/ Grouping
  - ( Department of Microbiology & Biochemistry)
- IQAC Participation
- Examination( University/ YASHADA
  - /MPSC/BANKING/ IBPS
- Chair Person Nation Seminar
- Judge In National Seminar
- Ex. NCC Officer worked as Captain up to 2012
- NSS/ NCC Participation
- Organizing Secretary State Level Microbiology
  - Summit 2013
- Co-ordinator (University Level) Extension activities
- Blood donation camp
- Blood grouping
- Biochemical Profile

**35. SWOC analysis of the department and Future plans**

- **Strength: Dedicated Faculty Members, Subject having**

**Demand amongst students, UG students can create awareness about health and hygiene,**

- **Weakness:** Delay of Appointment Procedure due to changing Government policies.
- **Opportunity:** More Researchers can be produced from lab who can contribute to society; Self employment can be increased by establishing pathology Labs, To get the Job in various Scientific Institutes, Industries, Consultancies ( Government And Non Government job), May Fly to Abroad for their future prospects
- **Challenges:** Retaining the unique character of the Department in an increasingly consumerist society poses a great challenge to the ideals the institution upholds
- **Future Plan:**
  - 1) To Establish Charitable pathology(Biochemistry) Laboratory for Poor peoples in Society
  - 2) To organize National & International Conferences/Workshop
  - 3) To get recognition for research laboratory.
- Any Others:
  - 1) **Memorandum of understanding** with
    - a) Dr. Hedgewar Blood Bank Akola
    - b) Shri Shivaji Science Coollege Akola
    - c) Microbiologist Society of India
  - 2) Linkage
    - a) Microbial Type Culture Collection, Chandigarh
      - a. Hi-Media Mumbai
      - b. Bio-era Pune
      - c. Excelris Biogenesis, Ahmemdabad

## Evaluative Report of the Departments of Bioinformatics

1. Name of the department : Bioinformatics
2. Year of Establishment : 2010
3. Names of Programmes / Courses offered (UG, PG, M. Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.) : UG  
Bioinformatics -Zoology- Chemistry  
Bioinformatics -Botany- Chemistry
4. Names of Interdisciplinary courses and the departments/units involved : Nil
5. Annual/ semester/choice based credit system (programme wise) : Semester system
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts : Self Finance Course

Teaching Post	Sanctioned	Filled
Fix Pay Lecturer	-	1
CHB teachers	-	8

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name of faculty	Qualification	Designation	Specialization	No. of years of experience	No of PhD students guided for the last 4 years.
Dr. S. M. Nagrale	M.Sc.NET, PhD	In-charge	(Entomology) Zoology	10	Nil
Miss P.A. Kashikar	M.Sc Bioinformatics	Fix Pay Lecture (Non-Grant)	Bioinformatics	2	Nil
Miss Preeti Umbarkar *	M.Sc	CHB	Mathematics	3	Nil
Miss Indira Soneji**	M.Sc	CHB	Biochemistry	2	Nil
Miss Khushbu	M.Sc	CHB	Biochemistry	2	Nil

Virvani**					
Miss M.K. Butole**	M.Sc	CHB	Microbiology	1	Nil
Miss A.A. Kalmegh*	M.Sc	CHB	Microbiology	1	Nil
Miss R.S. Kanherkar**	M.Sc	CHB	Microbiology	1	Nil
Miss M.P. Gujrathi*	M.Sc	CHB	Microbiology	1	Nil
Miss R.L. Katariya*	M.Sc	CHB	Computer Science	2	Nil

\* Contract basis (Non grant) for Three Units in I<sup>st</sup> semester

\*\* Semester based CHB

**11. List of senior visiting faculty:**

**Mr. C. N. Dipke**, Institute of Bioinformatics and Technology,  
Aurangabad

**12. Percentage of lectures delivered and practical classes handled (programmed wise) by temporary faculty : 100%**

	Lecturer delivered	Practical handled
Temporary faculty	100%	100%

**13. Student -Teacher Ratio (programme wise): 2014-15**

Programme	No of Students	Temporary teacher	Student - teacher ratio
UG	43	9	5 : 1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

Non-teaching post	Sanctioned	Filled
Academic support staff (Technical)	-	1
Administrative staff	-	-

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:**

Qualification	Ph.D.	M.Phil+Ph.D. +M.Phil.	NET+PhD NET/SET	M.Sc.
No. of permanent faculty	-	-	-	-

No. of temporary faculty	0	0	0	9
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16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : Nil
18. Research Centre /facility recognized by the University: Nil

**19. Publications :**

a) Publication per faculty

Faculty	No. Paper Published in		No. of paper presented in conference/ seminar/ workshop	Number of publications listed in International Database	Citation Index	Impact factor	Chapter in Books
	International / National journals	proceeding					
Miss P.A.Kashikar	1	-	1	-	-	-	-

**20. Areas of consultancy and income generated: Nil**

**21. Faculty as members in – : Nil**

a) National committees, b) International Committees, c) Editorial Boards....

**22. Student projects :**

- a) Percentage of students who have done in-house projects including inter departmental/programme : **100%**
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : **Nil**

**23. Awards / Recognitions received by faculty and students:**

**a) Faculty : 1**

Faculty	Awards / Recognitions received	Year
Miss P.A. Kashikar	Biotech consortium in India Limited, GVK Bioscience, Hyderabad stipend 8000/- per month	2012-13

**b) Students : 1**

Sr. No	Name of Student	Awards/ Prizes	Year
1	Ku Bhagyashree	2 <sup>nd</sup> prize in poster presentation in National level conference , At Amravati	2013-14

Gadodiya	
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**24. List of eminent academicians and scientists / visitors to the department**

Sr No	Eminent academicians and scientists / visitors	specialization
1	<b>Dr. P. A. Wadegaonkar</b> , Department of Biotechnology, Bioinformatics center S.G.B.Amravati University,Amravati	Bioinformatics Biotechnology
2	<b>Mr. C. N. Dipke</b> , Faculty, Institute of Bioinformatics and Technology, Aurangabad	Bioinformatics
3	<b>Dr. S.D. Patil</b> , Asso. Prof. Department of Microbiology, Shivaji College of Science,Amravati	Microbiology
4	<b>Dr. D.V.Hande</b> , Asso.Prof. Department of Botany, Shivaji College of Science,Amravati	Mycology
5	<b>Dr. Dipak Koche</b> Asst.Prof. Department of Botany, Shivaji College of Arts, Commerce and Science, Akola	Molecular Biology- Botany

**25. Seminars/ Conferences/Workshops organized & the source of funding a) National b) International : Nil**

**26. Student profile programme/course wise : Year 2013-14**

Name of the Course/programme	Applications received	Selected	Enrolled		% Pass percentage
			*M	*F	
B.Sc.I Sem-I	25	11	1	10	90
Sem- II		11	1	10	81.82
B.Sc.II Sem-III	9	9	2	7	66.67
Sem-IV		9	2	7	66.67
B.Sc.III Sem-V	14	14	5	9	100
Sem -VI		14	5	9	100

\*M = Male \*F = Female

**27. Diversity of Students**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
UG	100 %	00	00

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: Nil**

**29. Student progression**

Student progression	Against % enrolled
UG to PG	50-60%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
<b>Employed</b>	
• Campus selection	00
• Other than campus recruitment	10-20%
Entrepreneurship/Self-employment	20%

**30. Details of Infrastructural facilities**

Infrastructure facilities	status	Numbers
Library	Books in Central Library	72
	e-Books	90
Internet facilities for Staff & Students	Server Computer	1
	Desktops with LAN	10
Class rooms with ICT facility	Server Computer	1
	System Monitors	10
	Bioinformatics Software (Freeware)	4
	Printer	1
Laboratories	Laboratory (Capacity of 20 students) Area : 8.74 X 4.67= 40.81 Sq.m	1
	On sharing basis with Microbiology & Biochemistry for wet lab practical	2
Other	Teaching staff room	1
	Non teaching staff room	0

**31. Number of students receiving financial assistance from college, university, government or other agencies**

More than 70% of students are receiving financial assistance from college, university, government or other agencies in the form of scholarships, free ship, fellowships, stipend and prizes.

**32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts**

<b>Institutional visits / Seminar</b>	<b>Dates</b>
Visit to Department of Biotechnology, Bioinformatics Centre, S.G.B. Amravati University, Amravati	25 <sup>th</sup> Feb 2014
Participation of students in national conference and seminar at Amravati	20-21 June 2014

### **33. Teaching methods adopted to improve student learning**

- Adopted ICT, power point presentation for students
- Used Bioinformatics software teaching methods for technical understanding.
- Frequent use of computers and software based practical.
- Remedial classes taken for slow learner students
- Charts, visual aids are effectively used in teaching
- Provides Projects and assignment to the students for clear knowledge of the topic.

### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

Faculties and students participate in:

- NSS residential camp and students welfare programs.
- Clean college campus programme
- Tree plantation programme
- Blood donation camp

### **35. SWOC analysis of the department and Future plans**

#### **Strength:**

- Consistently excellent result
- Faculties are result oriented and dedicated

#### **Weakness:**

- No permanent faculty
- Less students admitted

#### **Opportunity:**

- Apply for research project for funding
- To develop consultancy and linkage
- To promote students and staff for research contribution

#### **Challenge:**

- To improve strength in interdisciplinary subject
- To extend the knowledge of bioinformatics for research and socio-economic status.

#### **Future plan**

- To develop collaboration with industries and institute.



- To apply for major and minor research project and national seminar.
- To develop one roof practical facility.

## Evaluative Report of Department of Botany

1. **Name of the department:** Botany
  2. **Year of Establishment :-** 1970
  3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :** UG- B.Sc.  
 Botany-Chemistry-Zoology  
 Botany-Chemistry-Microbiology  
 Botany-Chemistry-Bioinformatics
  4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
  5. **Annual/semester/choice based credits system (programmewise)**  
 Semester system  
 Semester I & II (B.Sc-I)  
 Semester III & IV (B.Sc-II)  
 Semester V & VI (B.Sc-III)
  6. **Participation of the department in the courses offered by other Departments: -** Nil
  7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:-** Nil
  8. **Details of courses/programmes discontinued (if any) with reasons :-** Nil
  9. **Number of Teaching posts :-** 3+12 (CHB)
- |                      | Sanctioned | Filled |
|----------------------|------------|--------|
| Professors           | -          | -      |
| Associate Professors | -          | -      |
| Asst. Professors     | 7          | 3      |
10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

Name	Qualification	Designation	Specialization	No.ofYears of Experience	No.ofPh.D. Students guidedforthelast4years
Prof. V.N. Badgujar	M.Sc.M.Phil. B.Ed. B.P.Ed.	Asst. Prof.(HOD)	Plant Taxonomy	6 Years	----
Prof. P.M.Khadse	M.Sc.M.Phil.	Asst. Prof.	Plant Physiology	6 Years	----
Dr.A.G. Thakare	M.Sc. Ph.D.	Asst. Prof.	Mycology	1 Year	----
No. of temporary faculty (contract/clock hour basis) - 12					

**11. List of senior visiting faculty :-**

- Shri. D.V. Rajwade (Ex.-Principal, Dept. of Botany, Shri R.L.T. College of Science, Akola)
- Prof. Shri. K.B. Sharma (Ex.-Head) Botany Dept. Shri. R.L.T. College of Science, Akola.
- Dr. D.G. Bhadange (Ex. Dean faculty of Science, SGBAUA. Principal, Shri Pundalikrao Gawali Arts & Science College, Shirpur (Jain). Dist - Washim)
- Prof. Dr. S.P. Rothe (Head. Dept. of Botany, Shri Shivaji Science College, Akola.)

**12.**

**Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty :-**

	Lecturer delivered	Practical handled
Temporary faculty	5.80 %	52.89 %

**13. Student-Teacher Ratio (program wise) (2014-15)**

Programme	Student- Teacher ratio
UG	22:1
Students	149 (B.Sc-I)+ 117 (B.Sc-II)+ 61 (B.Sc-III)=327 students
Staffs	3(Permanent)+12 (CHB)=15 staffs

**14.**

**Number of Academic support staff (Technical) and Administrative staff**

**f;sanctioned andfilled**

<b>Non-teaching post</b>	<b>Sanctioned</b>	<b>Filled</b>
Academic support staff(Technical)	04	04

**15. QualificationsofteachingfacultywithDSc/D.Litt/Ph.D/MPhil/PG.**

<b>Qualification</b>	<b>PG</b>	<b>M.phil.</b>	<b>Ph.D.</b>	<b>M.phil.+Ph.D</b>
No. of permanent faculty	---	02	01	----
No. of temporary faculty	10	---	01	01

**Ph.D of two permanent faculty are ongoing.**

**16.**

**Numberoffacultywithongoingprojectsfroma)Nationalb)Internationalfunding agencies andgrantsreceived :**

<b>Faculty</b>	<b>Project</b>	<b>Funding Agency</b>	<b>Grant Sanctioned</b>	<b>Grant Received</b>
Shri. P.M. Khadse	Minor Research Project (Ongoing)	UGC New Delhi	4,40,000/-	3,45,000/-
Sau V.N. Badgujar	Minor research Project (Proposed)	UGC New Delhi	--	---

**17. Departmentalprojectsfundedby DST-FIST;UGC, DBT, ICSSR,etc.andtotal grantsreceived**

<b>Faculty</b>	<b>Project</b>	<b>Sanctioned</b>	<b>Funding Agency</b>	<b>Grant Sanctioned Received</b>
Shri. P.M. Khadse	Minor Research Project	1	UGC New Delhi	3,45,000/-

**18. ResearchCentre/facilityrecognizedbytheUniversity : Nil (Under Process)****19. Publications:**

**Research Publications- 2010-11 to 2014-15**

Faculty	No. Paper Published in		No. of paper presented in conference/ seminar/ workshop	No of publication listed in International database	Impact Factor
	International / National Journals	Proceeding			
<b>Prof. V.N. Badgujar</b>	---	02	03	01	--
<b>Prof. P.M. Khadse</b>	02	02	04	01	2.093
<b>Dr.A.G. Thakare</b>	---	---	---	02	--

**20. Areas of consultancy and income generated:- Nil**

- **Phytochemical Study**
- **Antimicrobial Study**
- **Anatomical Study**
- **Ethnobotanical Study**
- **Palynological Study**

**All are Voluntary.**

**21. Faculty as members in**

a) National committees b) International Committees c) Editorial Boards....

- Prof. V.N. Badgujar :- Member of Botany Teacher's Association SGBAU Amaravati
- Prof. P.M. Khadse :- Member of Botany Teacher's Association SGBAU Amaravati

**22. Student projects :-**

- a) Percentage of students who have done in-house projects including interdepartmental/programme : **100%**
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : **Nil**

**23. Awards/Recognitions received by faculty and students**

**Award Received By Faculty:- Nil**

**Award Received By Students:-**

Sr.	Students Name	Award	Year
1	Shri Tushar Ghope	Secured 4 <sup>th</sup> position in Merit list of SGBAU Amravati	2013
2	Shri Tushar Ghope	Secured 1 <sup>st</sup> Rank in Intercollegiate seminar	2011

		competition at PhulsingNaikMahavidhyalayaPusad	
3	Ku. Kiran G. Bajar (B.Sc. II)	Secured 2 <sup>nd</sup> Rank in Intercollegiate Poster Competition ShriShivaji Sci. College Akola	2015
4	Shri. DigvijayBorde (B.Sc. III)	Secured 2 <sup>nd</sup> Rank in Intercollegiate Poster Competition ShriShivaji Sci. College Akola	2015

#### 24. List of eminent academicians and scientists/visitors to the department

1. Hon. Shri Ranjeet Patil. MLC, Akola Alumni of Shri R.L.T. College of Science, Akola.
2. Hon. Shri Gopikishanji Bajoriya. MLC, Akola, Alumni of Shri R.L.T. College of Science, Akola.
3. Vice-chancellor Dr. Mohanji Khedkar S.G.B Amravati University.
4. Pro. V.C. Dr. Jaykiranji Tidke S.G.B. Amravati University.
5. Dr. Eknath Patil Ex. Dean Faculty of Agriculture Dr. PDKV, Akola
6. Dr. D.G. Bhadange- Ex Dean, Faculty of Science, S.G.B. Amravati University. Principal, Shri Pundalikrao Gawali Arts & Science College, Shirpur (Jain). Dist. Washim.
7. Dr. Shrikant Patil, Director, Dept. of Lifelong learning, S.G.B. Amravati University.
8. Prof. Dr. S.P. Rothe, Head. Dept. of Botany, Shri Shivaji Sci. College Akola.
9. Dr. U.G. Molode, Asso. Prof., Achalpur College of Science, Achalpur. Alumni of Shri R.L.T. College of Science, Akola.
10. Dr. Shrikant Ahirkar, Ex Head., Dept of Entomology, Dr. PDKV Akola.
11. Shri Devdatta Phadke, Reshim Vikas Adhikari, Akola
12. Dr. Dinesh Khedkar, Asso. Prof., Deptt. of Botany, Shri Shivaji Science College, Amravati
13. Mr. Uday Vaze., President, NGO Shruti Vaibhav, Akola
14. Ku. K.M. Thorat, Head Dept. of Botany, Shri H.S. pundkar & Manoramabaipundkar Science College Balapur.

#### 25.

##### Seminars/Conferences/Workshops organized & the source of funding

##### a) National

- State level Workshop on “Sericulture Training and guidance” Shri R.L.T. College of Science, Akola, In Collaboration with Department of Lifelong learning on 16<sup>th</sup> Dec. 2010
- Organized “Tree plantation activity” on Each 15<sup>th</sup> August on Occasion of Independence Day.

##### b) International: Nil

**26. Student profile programme/coursewise: (Year 2013-14)**

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I (B2, B5 & B7) (Sem-I)	224	145	31	114	46.67%
B.Sc. II (B2, B5 & B7) (Sem-III)	72	72	18	54	64.86%
B.Sc. III (B2, B5 & B7) (Sem-V)	56	56	12	44	91.07%
B.Sc. I (B2, B5 & B7) (Sem-II)	129	129	103	26	75.19%
B.Sc. II (B2, B5 & B7) (Sem-IV)	73	73	19	54	46.58%
B.Sc. III (B2, B5 & B7) (Sem-VI)	57	57	12	45	94.74%

\*M=Male \*F=Female

**27. Diversity of Students**

Name of the Course	% of students from the	% of students from other	% of students from abroad
B.Sc. I	100%	---	---
B.Sc. II	100%	---	---
B.Sc. III	100%	---	---

**28.**

**How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

- Civil services : 00
- Defense services : 00

**29. Student progression**

Student progression	Against % enrolled
UG to PG	30%-50%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA

<b>Employed</b> •Campusselection •Other than campus recruitment	10-20 %
Entrepreneurship/Self-employment	5-10 %

### 30. Detailsof Infrastructuralfacilities

Infrastructure facilities	Status	Numbers
Library	Books in Central Library	1696
	Books in Departmental Library	205
Internet facilities for staff & students	Server Computer	1
	Desktops with LAN	2
Class rooms with ICT facility	Server Computer	
	System monitors	2
	Printer	1
	Audio Mike System	1
Laboratories	Laboratory (Capacity of 60 students) 8.26 x 13. 59 = 112.25 sq. m.	1
	Teaching staff room 7.09 x 3.12 = 22.12 sq. m	1
Other	Teaching staff room	1
	Non teaching staff room	--

#### • Botanical Garden :-

Department of Botany has Botanical Garden in the heart of College campus. The garden as well as campus is maintained by distinguished Flora. It also helps to enhance Knowledge & create Environmental awareness among the students. It increases percentage of oxygen for maintaining the clean environment.

In last three years Dept. of Botany has planted numbers of plants out of which some are medicinal plants , Ornamental plants, big trees and shady plants.

### 31.

#### Numberofstudentsreceivingfinancialassistancefromcollege,university,governmentorotheragencies

More than 70% of students are receiving financial assistance from college university, Government of other agencies in the form of scholarships, Free



ship, fellowships.

32.

**Detailsonstudentenrichmentprogrammes(speciallectures/workshops/seminar)withexternalexperts**

Sr	Resource person	Designation /Institution	Key Address	Programs	Month/ Year
1	Dr.Srikant Ahirkar	Ex. Head, Department ofEntomology Dr. PDKV, Akola	Sericulture	Workshop Sericulture: Training and Guidance	16 Dec. 2010
2	ShriDevdat taPhadke	Sericulture District Officer, Akola	Economy of sericulture		

**33. Teachingmethodsadoptedtoimprovestudentlearning**

- To give precise knowledge field trips, Botanical Excursion, industrial visits are arranged during Sessions (2010-15) to Katepurna, Chikhaldara, Popatkhed Van-Vari, Nagarjuna Medicinal Garden, Biotechnology Lab.(Dr.PDKV), Bhandardara Dam, Vitthal Mushroom Industry Amanatpur.etc.
- To improve student learning, ICT, seminar, guest lectures are organized for the students.
- Projects and assignments are given to the students.
- Remedial classes are taken for slow learner students.
- Charts, visual aids, models, documentary etc. are shown to the students,
- Power point presentations are arranged for the students.

34.

**ParticipationinInstitutionalSocialResponsibility(ISR)andExtension activities**

**Extensionactivities**

- Faculty members are working as NSS programme officer and extend their services in NSS blood donation Camp & various extra curricular activities.
- Faculty members are working as co-ordinators and members in various committees of college.
- Prof.V.N.Badgujar has worked as co-ordinator of One Day State level Workshop on “Sericulture Training and guidance” 16<sup>th</sup> Dec.2010 organized by Shri R.L.T. College of Science, Akola
- Prof. P.M.Khadse worked as Presiding officer in the Parliamentary as

well as Maharashtra Assembly election, 2014.

- Prof. P.M. Khadse worked as a member of sedentary squad on the HSSC Examination, March 2013.
- Dr.A.G.Thakare is working as aNSS programme officer from 2014-15.
- Department made MOU with Vitthal Mushroom Industry, Amnatpur, Akola
- Tree plantation is done on every year on the occasion of Independence Day i.e. 15<sup>th</sup> August.Students & All staff members have participated in this Activity.
- Environmental day is celebrated by- tyingRakhis to the tree for serving the motto “Save tree save Earth”.

### **35. SWOC analysis of the department and Future plans.**

#### ➤ **Strength:-**

- Well flourished laboratory with advance research equipments.
- Well developed Botanical Garden.
- Shri. D.V. Rajwade was Ex. Principal from our dept.

#### ➤ **Weaknesses:-**

- Insufficient teaching staff.

#### ➤ **Opportunities:-**

- Major project to be sanctioned by UGC.
- Teachers take part in the research activity national and international seminar & Conferences.

#### ➤ **Challenges:-**

- Recommendations for the up gradation of practically and job oriented syllabus.
- Interdisciplinary and collaborative research work will be undertaken.

#### ➤ **Future Plans:-**

- To organize National & International Conferences & seminar.
- More advanced research proposals to be established.
- Major research proposals to be sent for the financial assistance.

## Evaluative Report of the Department of Chemistry

1. **Name of the department** : **Chemistry**
2. **Year of establishment** : **1970**

3. **Names of programmes/courses offered** :  
(UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.)

**UG** (from 1970)  
**PG** (from 2010)  
**Ph.D.** (from 2003)

Programme	Course	Batch and subject combination
UG	B.Sc.-I (Sem-I,II) B.Sc.-II (Sem-III,IV) B.Sc.-III (Sem-V,VI)	B1 - Chemistry, Microbiology, Biochemistry B2 - Chemistry, Microbiology, Botany B3 - Chemistry, Microbiology, Zoology B5 - Chemistry, Botany, Zoology B6 - Chemistry, Zoology, Bioinformatics B7 - Chemistry, Botany, Bioinformatics P4 - Chemistry, Physics, Mathematics
PG	M.Sc.-I (Sem-I,II) M.Sc.-II (Sem-III,IV)	Chemistry
Ph.D.	---	Chemistry

4. **Names of interdisciplinary courses and the departments/units involved** : Nil
5. **Annual/semester/choice based credit system (programme wise)** :  
**UG- Semester** -  
**PG - Semester with CBCS**
6. **Participation of the department in the courses offered by other departments** : Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.** : Nil
8. **Details of courses/programmes discontinued (if any) with reasons** : Nil

9. **Number of teaching posts :**

Teaching Posts	Sanctioned	Filled
Professors	0	0
Associate Professors	0	0
Assistant Professors	10	5

**10. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D./M.Phil. etc.) :**

Name of faculty	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D. students guided for the last 4 years
<b>Dr. P. P. Deohate</b>	M.Sc., Ph.D., B.Ed.	Assistant Professor & Head	Organic Chemistry	7½	3
<b>Dr. P. T. Agrawal</b>	M.Sc., Ph.D., M.Phil., M.Ed	Assistant Professor	Organic Chemistry	5½	0
<b>Mr. P. R. Kawle</b>	M.Sc., NET(JRF)	Assistant Professor	Organic Chemistry	5½	---
<b>Dr. K. M. Heda</b>	M.Sc., Ph.D., B.Ed.	Assistant Professor	Organic Chemistry	9 (months)	---
<b>Dr. A. G. Sarap</b>	M.Sc., Ph.D.	Assistant Professor	Organic Chemistry	9 (months)	---
No. of temporary faculty (contract/clock hour basis) - 22					

**11. List of senior visiting faculty:**

- Prof. Dr. L. J. Paliwal**, R. T. M. Nagpur University, Nagpur
- Prof. Dr. B. N. Berad**, R. T. M. Nagpur University, Nagpur
- Prof. Dr. V. S. Jamode**, Ex-Pro-Vice-Chancellor, S. G. B. Amravati University, Amravati
- Prof. A. S. Wankhade**, Ex-Faculty, Government Vidarbha Institute of Science and Humanities, Amravati
- Dr. W. S. Marathe**, Ex-Faculty, Shri Brijlal Biyani Science College, Amravati
- Dr. P. R. Mandlik**, Shri Shivaji Science College, Amravati.
- Dr. S. P. Kulkarni**, Adarsh Mahavidyalaya, Dhamangaon (Rly)
- Dr. H. S. Chandak**, G. S. College, Khamgaon.

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :**

Programme	Percentage of classes engaged by temporary faculty	
	Theory	Practical
UG	66.66	67.42
PG	68.75	37.50

**13. Student - teacher ratio (programme wise) :**

Programme	Student - teacher ratio
UG	26.81 : 1
PG	2.69 : 1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled :**

Staff	Sanctioned	Filled
Administrative staff	1	1
Academic support (technical) staff	4	4
No. of temporary academic support (technical) staff - 5		

**15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG. :**

Qualification	Ph.D.	Ph.D. + M.Phil.	PG + NET/SET	PG
No. of permanent faculty	3	1	1	0
No. of temporary faculty	1	1	1	19

**16. Number of faculty with ongoing projects from : 2 -**  
**Minor Research Project**

a) National b) International funding agencies and UGC, New Delhi grants received Grant - Rs. 2,25,000 /-

**17. Departmental projects funded by DST-FIST, UGC, DBT, ICSSR etc. and total grants received :**

Name of faculty	Project	Project title	Funding agency	Grants sanctioned/received
<b>Dr. P. P. Deohate</b>	Minor	Study of potential of N-aryl/alkyl-S-chloroiso-thiocarbamoyl chlorides and N-aryl/alkyl isocyanodichlorides in the synthesis of dithiadiazines, thiadiazines, triazines and their antimicrobial activity	UGC	Rs. 2,00,000 /-
<b>Dr. P. T. Agrawal</b>	Minor	Synthesis of N-lactosylated 1,2,4-dithiazolidines and their antimicrobial activity	UGC	Rs. 1,30,000 /-
<b>Mr. P. R. Kawle</b>	Minor	Synthesis of substituted pyrazoles and pyrimidines and study of their antimicrobial activity	UGC	Rs. 95,000 /-

18. Research centre/facility recognized by the university :

Intake capacity of laboratory	No. of research students			Ph.D. Supervisors
	Ph.D. awarded	Thesis submitted	Registered	
5	1	2	4	Dr. P. P. Deohate Dr. P. T. Agrawal

19. Publications:

a) Publications per faculty

- Number of papers published in peer reviewed journals (national/International) by faculty and students
- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Monographs, chapter in books, books edited, books with ISBN/ISSN numbers with details of publishers, citation index, SNIP, SJR, impact factor, h-index
- 

Name of faculty	No. of papers published in			No. of publications listed in international database		No. of papers presented in conference/seminar/workshop		Citation Index	Impact factor	h-index	Chapter in books
	International journal	Conference proceeding									
				a	b	a	b				
<b>Dr. P. P. Deohate</b>	47	2	2	47	25	31	15	48	0.120-1.028	3	1
<b>Dr. P. T. Agrawal</b>	18	1	---	18	16	19	9	---	0.120-0.629	---	---
<b>Mr. P. R. Kawle</b>	6	6	1	6	6	10	8	---	0.120-1.028	---	---
<b>Dr. K. M. Heda</b>	6	6	2	6	6	9	9	1	0.120-1.081	1	---
<b>Dr. A. G. Sarap</b>	3	2	---	3	2	6	6	---	0.120-0.251	---	---
<b>Research students</b>	8	8	1	8	8	2	2	---	0.120-1.028	---	---
<b>Total</b>	88	6	6	88	63	77	49	---	---	---	1

a - Entire period, b - Session 2010-11 to 2014-15

**Book details** - A text book of chemistry for third semester of B.Sc., Prashant Publications, Jalgaon, ISBN : 978-93-84228-57-6.

**20. Areas of consultancy and income generated:** Income - Nil

- Analysis of soil, drinking and irrigation water
- Determination of physico-chemical parameters of samples of project of school and college students

**21. Faculty as members in -**

- a) National committees b) International committees c) Editorial boards...:

Name of faculty	Membership (National/university level committees)
<b>Dr. P. P. Deohate</b>	1. Indian Chemical Society, Kolkata 2. Indian Council of Chemists, Agra 3. Nagpur University Teachers' Association, Nagpur 4. Amravati University Chemistry Teachers' Association, Amravati (Treasurer) 5. Subject Examination Committee of Sant Gadge Baba Amravati University, Amravati
<b>Dr. P. T. Agrawal</b> <b>Mr. P. R. Kawle</b>	1. Indian Chemical Society, Kolkata 2. Indian Science Congress Association, Kolkata 3. Amravati University Chemistry Teachers' Association, Amravati
<b>Dr. K. M. Heda</b>	1. Amravati University Chemistry Teachers' Association, Amravati
<b>Dr. A. G. Sarap</b>	1. Indian Science Congress Association, Kolkata

**22. Student projects :**

- a) Percentage of students who have done in-house projects including interdepartmental/programme : **100 %**
- b) Percentage of students placed for projects in organizations outside the institution i.e. in research laboratories/industry/other agencies : Nil

**23. Awards/recognitions received by faculty and students : 4 + 35**

## a) Faculty

• **Dr. P. P. Deohate**

1. Recognized as a Ph.D. supervisor in the subject chemistry by Sant Gadge Baba Amravati University, Amravati and Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
2. Awarded and felicitated by Sant Gadge Baba Amravati University, Amravati at the hands of Honorable Vice-Chancellor Dr. Kamal Singh for extra-ordinary work in blood donation through NSS.

• **Dr. P. T. Agrawal**

1. Awarded Ph.D. degree by Sant Gadge Baba Amravati University, Amravati.
2. Recognized as a Ph.D. supervisor in the subject chemistry by Gondwana University, Gadchiroli.

**b) Students**

<b>Awards / Prizes (2010-11 to 2013-14)</b>	<b>Number</b>
Students secured position in the merit lists of Sant Gadge Baba Amravati University, Amravati	5
Students achieved colour coat of Sant Gadge Baba Amravati University, Amravati and participated in state level research festival - "Avishkar"	3
Students achieved 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize in university level intercollegiate "Seminar Competition"	4, 4, 2
Students achieved 1 <sup>st</sup> prize in university level intercollegiate "Chemistry Quiz"	6
Students achieved 1 <sup>st</sup> prize in state/national level paper presentations	2
Students selected for "Rajiv Gandhi National Fellowship" of UGC of Rs. 16,000/- per month for doing Ph.D.	1
Students achieved 1 <sup>st</sup> prize in science project competition - "Science Pundit"	1
Students selected for "Inspire Scholarship" of Rs. 4,00,000/- of Govt. of India for the period of 5 years	5
Students secured 1 <sup>st</sup> rank in "Concept Test in Chemistry" of Indian Association of Chemistry Teachers	1
Students achieved 3 <sup>rd</sup> prize in state level "Chemistry Talent Search Examination"	1

**24. List of eminent academicians and scientists/visitors to the department:**

1. **Dr. H. M. Meshram**, Sr. Principal Scientist, Discovery Laboratory, IICT, Hyderabad
2. **Dr. D. M. Dharmadhikari**, Director, NEERI, Nagpur
3. **Dr. P. N. Pabrekar**, Vice-Principal, Kelkar Vaze Mahavidyalaya, Mumbai
4. **Dr. J. N. Malviya**, CEO, Solar Thermal Federation of India, Pune
5. **Dr. N. S. Chandan**, Siddharth College, Mumbai
6. **Dr. R. N. Shukla**, Samrat Ashoka Technological Institute, Vidisha
7. **Dr. P. Parashar**, Government P. G. College, Jhalwar
8. **Dr. R. S. Prasad**, Vinoba Bhave University, Hajaribag
9. **Dr. Y. K. Mishra**, Government P. G. Arts & Science College, Ratlam
10. **Dr. S. Tiwari**, I.V. P.G. College, Jawa, Rewa
11. **Dr. P. K. Rahangadale**, Chairman, BOS-Chemistry, R. T. M. Nagpur University, Nagpur
12. **Dr. S. B. Rewatkar**, Chairman, BOS-Chemistry, Gondwana University, Gadchiroli
13. **Mr. Zaka Ul-Hq**, Justice, Bombay High Court, Mumbai



14. **Dr. M. K. Khedkar**, Vice-Chancellor, S. G. B. Amravati University, Amravati
15. **Dr. J. A. Tidke**, Pro-Vice-Chancellor, S. G. B. Amravati University, Amravati
16. **Dr. F. C. Raghuwanshi**, Dean, Faculty of Science, S. G. B. Amravati University, Amravati
17. **Dr. S. G. Bhadange**, Ex-Dean, Faculty of Science, S. G. B. Amravati University, Amravati and Principal, ShriShivaji College of Arts, Commerce and Science, Akola
18. **Dr. A. S. Aswar**, Chairman, BOS-Chemistry, S. G. B. Amravati University, Amravati
19. **Dr. S. P. Deshmukh**, Ex-Chairman, BOS-Chemistry, S. G. B. Amravati University, Amravati and Vice-Principal, ShriShivaji College of Arts, Commerce and Science, Akola
25. **Seminars/conferences/workshops organized and the source of funding a) National b) International** : Nil

**26. Student profile programme/course wise (2013-14):**

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			Male	Female	
<b>UG</b>					
B.Sc.-I (Sem-I)	446	290	83	207	57.52 %
B.Sc.-I (Sem-II)	290	290	83	207	60.08 %
B.Sc.-II (Sem-III)	179	179	51	128	40.22 %
B.Sc.-II (Sem-IV)	179	179	51	128	61.80 %
B.Sc.-III (Sem-V)	123	123	32	91	83.61 %
B.Sc.-III (Sem-VI)	124	124	32	92	91.13 %
<b>PG</b>					
M.Sc.-I (Sem-I)	39	18	9	9	50.00 %
M.Sc.-I (Sem-II)	17	17	9	8	41.17 %
M.Sc.-II (Sem-III)	13	13	4	9	61.53 %
M.Sc.-II (Sem-IV)	13	13	4	9	84.62 %

\* Annual Pattern

**27. Diversity of Students(2014-15) :**

Name of the course	% of students from same state	% of students from other states	% of students from abroad
UG	99.86	0.14	00
PG	97.14	2.86	00

28. **How many students have cleared national and state competitive examinations such as NET, SLET, GATE, civil services, defense services etc.?**

- Defense services : 01

- Ph.D. aptitude test : 02

### 29. Student progression

Student progression		Against % enrolled
UGto PG		30-50 %
PG to M.Phil.		---
PG to Ph.D.		1-2 %
Ph.D. to Post-Doctoral		---
Employed	• Campus selection	---
	• Other than campus recruitment	10-20 %
Entrepreneurship/Self-employment		5-10 %

### 30. Details of Infrastructural facilities :

Infrastructural facilities	Status	Numbers
a) Library (Departmental)	Books	213
	Journals	14
	Books (Central library)	4433
b) Internet facilities for staff and students	Desktops with internet facility	3
	Laptops	3
c) Class rooms with ICT facility	PG class rooms	2
	LCD projector	1
	OHP	1
	Printers	2
	Printer with scanner and copier	1
	Scanner	1
	Audio system	1
d) Laboratories	UG laboratories (Area - 106, 110, 80 Sq.mts.) (Capacity - 56, 48, 40 students)	3
	PG + research Laboratory (Area - 85 Sq.mt.) (Capacity - 28 students)	1
	Instrument/balance rooms (Area - 7, 12 Sq.mts.)	2
	Chemical and glassware storage room (Area - 19 Sq.mt.)	1
	Acid and gas cylinder storage room (Area - 17 Sq.mt.)	1
	Gas supply chamber	2
e) Other	HOD cabin (Area - 10 Sq.mt.)	1
	Teaching staff rooms (Area - 15, 23 Sq.mts.)	2
	Non-teaching staff room	1

	(Area - 15 Sq.mt.)	
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**31. Number of students receiving financial assistance from college, university, government or other agencies :**

More than 70 % of students are receiving financial assistance from college, university, government or other agencies in the form of scholarships, freeships, fellowships, prizes etc.

**32. Details on student enrichment programmes (special lectures/workshops/seminar)with external experts :**

a) Special/guest lectures

Resource person/external expert	Topic	Date
1. <b>Prof. A. S. Wankhade,</b> Govt. Vidarbha Institute of Science and Humanities, Amravati	Quantum chemistry	17.10.2014 30.09.2014 10.02.2014 23.09.2013 15.03.2013 15.09.2012
	Statistical thermodynamics	24.02.2014 05.04.2013
2. <b>Dr. P. R. Mandlik,</b> ShriShivaji Science College, Amravati	Symmetry and group theory	05.10.2013 15.10.2012
3. <b>Dr. W. S. Marathe,</b> ShriBrijlalBiyani Science College, Amravati	Metal ligand bonding and magnetochemistry	26.10.2013 25.10.2013 12.10.2012
	Electronic spectra	06.03.2014 05.03.2014 01.04.2013
	Stereochemistry, bonding in main group compounds and molecular orbital theory	30.10.2012
4. <b>Dr. V. S. Jamode,</b> Sant Gadge Baba Amravati University, Amravati	N.M.R. spectroscopy	17.10.2014 02.10.2014 26.10.2013 12.09.2012
	Spectroscopy problems	05.04.2013
5. <b>Dr. H. M. Meshram,</b> Indian Institute of Chemical	Green chemistry	10.01.2014

Technology (IICT), Hyderabad		
6. <b>Dr. N. S. Chandan,</b> Siddharth College of Arts, Science and Commerce, Mumbai	Mossbauer spectroscopy	10.02.2014 23.03.2013
7. <b>Dr. S. P. Kulkarni,</b> AdarshaMahavidyalaya, Dhamangaon (Rly)	Radio chemical methods	27.01.2015 25.02.2014 24.03.2013
8. <b>Dr. L. J. Paliwal,</b> RashtrasantTukadojiMaharajNagpur University,Nagpur	Metallic cluster	28.10.2012
9. <b>Dr. B. N. Berad,</b> RashtrasantTukadojiMaharajNagpur University,Nagpur	Spectroscopy problems	29.10.2012 28.10.2012
10. <b>Dr. H. S. Chandak,</b> G. S. Science, Arts and Commerce College, Khamgaon	Designing the synthesis based on retrosynthetic analysis	09.03.2013
	Chemistry in three dimensions (Stereochemistry)	02.10.2014
11. <b>Dr. P. S. Pande,</b> ShankarlalKhandelwalCollege, Akola	Designing the synthesis based on retrosynthetic analysis	08.04.2012
12. <b>Dr. JaydeepMalviya,</b> CEO, Solar Thermal Federation of India, Pune	Energy conservation and energy efficiency	04.12.2010

b) **Workshop/seminars**

Title	External expert/judge	Date
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1. Regional workshop on spectroscopic and stereospecific perspectives of chemistry	1. <b>Dr. V. S. Jamode</b> , Ex-Pro-Vice-Chancellor, Sant Gadge Baba Amravati University, Amravati perspectives of chemistry 2. <b>Dr. H. S. Chandak</b> , G. S. Science, Arts and Commerce College, Khamgaon	02.10.2014
2. University level seminar competition for M.Sc.-I students on green chemistry in collaboration with Amravati University Chemistry Teachers' Association (AUCTA)	1. <b>Dr. H. S. Chandak</b> , G. S. Science, Arts and Commerce College, Khamgaon 2. <b>Mr. K. N. Puri</b> , ShriShivaji Arts, Commerce and Science College, Akola 3. <b>Mr. V. D. Mane</b> , ShankarlalKhandelwal College, Akola	28.02.2012

c) **Industrial visits/educational study tours**

Industry	Date
1. AdarshGosevaEvamSashodhanPrakalp, Mhaispur	12.03.2014
2. Parle-G Biscuits Industries, Shivangi Bakers Pvt. Ltd., Khamgaon	11.02.2012
3. Leben Laboratories Pvt. Ltd. Akola	09.01.2011

**33. Teaching methods adopted to improve student learning :**

1. ICT and power point presentation technique are used for effective teaching and better understanding of difficult topics by students.
2. Notes, question bank, university question papers, model answer papers and practicalbooklets are provided to the students.
3. Ball-stick models, charts, visual aids are effectively used in teaching-learning process.
4. Practical's by computer simulation and microwave assisted techniquesare performed. Software's like CHEM-DRAW and ISIS-DRAW are also utilized.
5. Seminars of students by power point presentation using LCD projector and OHP-transparencies are conducted.
6. Group discussions amongst students, question solving sessions, curriculum based aptitude/concept tests, guest lecturers of eminent academicians are organized.
7. Remedial classes are arranged for slow learner students.

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities:**

1. Faculty members have worked as an examiner/judge in science exhibitions and paper/poster presentation competitions organized by other institutions. They worked as a senior supervisor for Maharashtra Talent Search Examination.
2. Faculty members have helped the students in preparation of seminar, quiz, debate, elocution competition, oral/poster presentation, science exhibition, research festival and completing the projects of school and college students.
3. Faculty members have extended their services through participation in NSS, blood donation, cultural, social activities and various college committees. The sports and study material was donated to school students.
4. The analysis of soil, drinking and irrigation water and determination of physico-chemical parameters of samples of project of school and college students have done by the faculty members.

**35. SWOC analysis of the department and Future plans :**

- **Strengths**

1. Dedicated, Ph.D./NET qualified, result oriented faculty.
2. Four highly equipped, sophisticated, well furnished, spacious laboratories with safety measures.
3. Research laboratory recognized by Sant Gadge Baba Amravati University, Amravati.
4. Strong research output in terms of research paper publications in journals of national and international repute.

- **Weakness**

1. Inadequate permanent teaching, administrative and academic support staff.
2. No permanent/regular faculty for PG programme as it is on non-grant basis.

- **Opportunities**

1. To get the job in research institutes, chemical and pharmaceutical industries for PG and Ph.D. students.
2. To establish collaboration and to develop more consultancy services.
3. To do the interdisciplinary research having social relevance.

- **Challenges**

1. To bridge the gap between curriculum and industrial requirement.
2. To increase the employability of students through skill development.

- **Future plans**

1. To organize state/national level conference, seminar, workshop for student and faculty.
2. To establish the linkages with reputed national and international research laboratories and institutes.

3. To submit the proposals for minor and major research projects to funding agencies like UGC, DST, CSIR etc.
4. To increase the number of research paper publication in high impact factor journals of national and international repute.
5. To motivate the students for doing research work and preparing for competitive, NET, SLET, GATE examinations.
6. To start career oriented certificate/diploma courses.

**35. Any other :**

- The department has MoU/collaboration/linkages with the following institutes.
  1. ShriShivaji College of Arts, Commerce and Science, Akola.
  2. AdarshGosevaEvamAnusandhanPrakalp, Mhaispur, Akola.
  3. Amravati University Chemistry Teachers' Association, Amravati.
  4. Sophisticated Analytical Instrumentation Facility (SAIF), Chandigarh.
  5. Central Drug Research Institute (CDRI), Lucknow.
- The seminars and group discussions of students were organized in each semester every year.
- The aptitude test in chemistry for B.Sc.-III students was organized every year.
- The aptitude test in chemistry for B.Sc.-III students in collaboration with Amravati University Chemistry Teachers' Association (AUCTA) was organized on 19.05.2013.
- The concept test in chemistry for B.Sc. students in collaboration with Indian Association of Chemistry Teachers (IACT) was organized on 17.12.2011.
- The chemistry talent search examination for B.Sc.-I students in collaboration with MooljiJaitha College, Jalgaon was organized on 23.12.2012.

## Evaluative Report: Department of Computer Science & Information technology

1. **Name of the department:** Computer Science & Information Technology
  
2. **Year of Establishment:** B.Sc.(Computer Science ) 1997-98  
(Grant in aid from 1 Apr 2012 )  
B.Sc.(Information Technology ) 2010-11  
(Self Finance Basis)
  
3. **Names of Courses offered :** U.G. in  
B.Sc. (Computer Science)  
( CPS + PHY + MATHS  
CPS + PHY + ELE )  
B.Sc. (Information Technology)  
( I.T. + PHY + MATHS  
I.T. + PHY + ELE )  
Three Years Integrated Bachelor of Science
  
4. **Names of Interdisciplinary courses and the departments/units involved :** Nil
  
5. **Annual/semester/choice based credits system (programmewise) :** Semester
  
6. **Participation of the department in the courses offered by other departments :** Nil
  
7. **Courses in collaboration with other universities, industries, foreign institutions, etc. :** Nil
  
8. **Details of courses/programmes discontinued (if any) with reasons :** Nil
  
9. **Number of Teaching posts :**

	Sanctioned	Filled
Professors	-----	-----
Associate Professors	-----	-----



Asst.Professors	03	01
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## 10.

**Faculty profile with name, qualification, designation, specialization, (D. Sc./D.Litt./Ph.D./M.Phil.etc.,) :**

Name	Qualification	Designation	Specialization	No.of Years of Experience	No.of Ph.D. Students guided for the last 4 years
Mr. R. G. Chavan	M.Sc.(App. Ele.)	Associate Professor & (Incharge H.O.D)	Electronics	25	-----
Mr. Ram B. Ghayalkar	M.Sc(Comp.Sci.) & M.Sc.(Comp. S/w), M. Phil., SET, NET, B.Ed.	Assistant Professor	Computer Science & Software	09	-----
Mrs. R. A. Chandak	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	11	
Miss. D. K. Gajbhiye	M.Sc. (Comp Sci.), MPhil, B.Ed	(C.H.B)	Computer Science	5	
Miss. R. L. Katariya	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	3	
Miss. P. C. Mishra	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	2	
Miss. N. U. Bhattad	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	2	
Miss. Anwar Huque	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	2	
Miss. Priti Agrawal	M.Sc. (Comp Sci.)	(C.H.B)	Computer Science	5	
Mr. Suresh J Patil	M.Sc. (IT)	(On Contract Basis)	Information Technology	01	

**11. List of senior visiting faculty : Nil**

## 12.

**Percentage of lectures delivered and practical classes handled (program mewise) by temporary faculty : Theory : 66%**

Practical : 75 %

**13. Student-Teacher Ratio(programmewise) : 30 : 1**

Program	No. of Student	Ratio
B.Sc. (Comp.Sci.)	142	17 : 1
B.Sc. (I. T.)	102	20 : 1

**14.**

**Number of academic support staff (technical) and administrative staff sanctioned and filled : 03**

Post	No. of Post
Permanent supportstaff	2
Temporary supportstaff	2
Total No. of Post	4

**15. Qualification of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.**

Qualifications	No. of faculties
Ph.D.	00
M.Phil., SET, NET	01
M.Phil.	01
PG	07

**16.**

**Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received. : Nil**

**18. Research Centre/facility recognized by the University. : Nil**

**19. Publications:**

a) Publication per faculty

Sr.No.	Name of Faculty	Paper Presented in Conference/Workshop/Seminar
1	Mr. Ram B. Ghayalkar	05

**20. Areas of consultancy and income generated: Non Remunerative Consultancies (Voluntary)**

- Installation of software and hardware
- Website designing, services for accounting and payroll software, maintenance of bio-metric machine software.
- Computer literacy training program for teaching and non-teaching staff.
- ICT guidance training.

**21. Faculty as members in**

a) National committees b) International Committees c) Editorial Boards.... : Nil

- Member of Sant Gadge Baba Amravati University Computer Science

Teacher Association, Amravati

- One of the temporary faculty is Board of Study (BOS) member in H. S. C. Board Maharashtra Board for I.T. and also member of Book Editorial Board HSC.

### 22. Student projects

Percentage of students who have done in-house projects including interdepartmental/programme : 100%

Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : Nil

### 23. Awards/Recognitions received by faculty and students

Name	Faculty/Student	Award	Year
Miss. Subhada Kulkarni	Student	• 1 <sup>st</sup> merit in B.Sc. Final Exam-2011 of Amravati University.	2012
		• Color Coat in research competition AVISHKAR university level.	2011
Miss. Sulabha Kulkarni	Student	• 2 <sup>nd</sup> merit in B.Sc. Final Exam-2011 of Amravati University.	2012
		• Color Coat in research competition AVISHKAR university level.	2011
Mandar Navghare	Student	• Ranked 1 <sup>st</sup> in project competition science Pundits-2014	2014
Digvijay Borde	student	• 2 <sup>st</sup> Price in Poster Competition Price on Wet Land conservation	2015

### 24. List of eminent academicians and scientists/visitors to the department

Sr.No	Eminent Academician/Scientist/Visitor	Designation and department
1.	Dr. Mohan Khedkar	Vice-Chancellor, S.G.B. Amravati University, Amravati
2.	Dr. F.C. Raghuwanshi	Dean, Science faculty, S.G.B. Amravati university.

3.	Dr.D.S.Dhote	Professor & Head, Department of electronics,BrijlalBiyani College, Amravati.
4	Dr.P.B. Raghuwanshi	Senate member,S.G.B.Amravati University.
5	Dr. A. B. Manwar	Associate Professor, Department of Computer Science, S.G.B. Amravati University Amravati
6.	Dr. Mohd. AtiqueMohd. Junaid	Associate Professor, Department of Computer Science, S.G.B. Amravati University Amravati
7	Dr. S.R. Kalmegh	Associate Professor, Department of Computer Science, S.G.B. Amravati University Amravati
8.	Dr. SandipR.Sirsat	Associate Professor & Head at ShriShivaji Senior Science College, Chikhli
9.	Dr.N.B.Raut	Associate Professor & Head, Department of Electronics, Vidyabharti college, Amravati.
10	Dr.S.G.Shende	Associate Professor & Head, Department of Electronics, ShriShivaji College, Akola (Ex Chairman BOS-Electronics)
11	Dr.J.S.Deshpande	Pro V.C. S.G.B.Amravatiuniversity.Amravati.
12	Dr.S.K.Omanwar	Professor & Head, Department of physics, S.G.B.Amravati university Amravati.

**25. Seminars/Conferences/Workshopsorganized&thesourceoffundinga)**

**Nationalb)International : Nil**

**26. Studentprofileprogramme/coursewise:**

Session: 2013-14

Nameofthe Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I (Sem-I) (Comp. Sci.)	224	33	6	27	88.64%
B.Sc. I (Sem-II) (Comp. Sci.)		33	6	27	97.73%
B.Sc. I (Sem-I) (I. T.)	224	40	15	25	46.15%
B.Sc. I (Sem-II) (I. T.)		40	15	25	66.67%

B.Sc. II (Sem-III) (Comp. Sci.)	40	40	5	35	75%
B.Sc. II (Sem-IV) (Comp. Sci.)		40	5	35	82.50%
B.Sc. II (Sem-III) (I. T.)	29	29	15	14	62.07%
B.Sc. II (Sem-IV) (I. T.)		29	15	14	65.52%
B.Sc. III (Sem-V) Comp. Sci.)	43	43	12	31	78.57%
B.Sc. III (Sem-VI) Comp. Sci.)		43	12	31	85.71%
B.Sc. III (Sem-V) (I. T.)	15	15	12	3	81.25
B.Sc. III (Sem-VI) (I. T.)		15	12	3	87.50%

\*M=Male \*F=Female

**27. Diversity of Students**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc. I (Comp. Sci.)	100%	0 %	0 %
B.Sc. (I. T.)	100%	0 %	0 %

**28.**

**How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

:

- One student is selected in Defense service as post of Lieutenant in Chennai

**29. Student progression**

Student progression	Against % enrolled
UG to PG	30 to 50
PG to M.Phil.	-----
PG to Ph.D.	-----
Ph.D. to Post-Doctoral	-----

Employed •Campusselection (OFF Campus) •Other than campus recruitment	5 % 10-15%
Entrepreneurship/Self-employment	5-10 %

### 30. Detailsof Infrastructuralfacilities

#### a) Library :

- Departmental Library having 35 books with different titles. In Central Library 714 books are available on Computer Oriented Topics.
- E-books and PowerPoint Presentations are also available in department.
- Spoken tutorial type study material are available(i.e. Audio Visual self-study material on different types on FOSS. )

#### b) InternetfacilitiesforStaff&Students : Yes

Internetfacility available for students &facultiesnot only through Wired LAN but also WIFI.

#### c) Class rooms with ICT facility :

ICT facility available in both Computer Science & Information Technology Labs with LCD/ DLP Projectors, speakers, Web Cam, Microphone& Broad Band Internet Connection.

#### d) Laboratories :

Size of Computer Science Lab.:22'9''X 29'3'' = 665.43sq.ft. (61.820m<sup>2</sup>)

Size of Information Tech. Lab.:8'8''X12'3''= 437.06sq.ft(40.604m<sup>2</sup>)

Sr. No.	Equipment	Quantity (Comp. Sci. Lab)	Quantity (I.T. Lab)
1	Computers	21	(1 Server + 14 Terminals)
2	Laser Printer	1	1
3	Scanner (UMAX)	1	---
4	Dot Matrix Printer	13	---
5	UPS (For Entire Lab 7.5 KVA)	1	
6	LCD/ DLP Projector	1	1
7	White board	1	1
8	Broad Band Internet Connection	1	1

9	Air Conditioner	1	---
10	Plastic Stools / Chairs	62	27 + 7
11	Fire Extinguisher	1	1
12	Projector screen	---	1

### 31.

#### Number of students receiving financial assistance from college, university, government or other agencies :

- More than 70% students receive financial assistance from Government / College / University / other agencies in the form of scholarship, freeship, prices etc.

### 32.

#### Details on student enrichment programmes (special lectures/workshops/seminar) with external experts :

- Department of computer Science & I.T. organized Online Spoken-tutorial Workshop on dated 30-01-2015 through Video Conferencing (*Virtual Class*) in Computer Science Laboratory. Students from B.Sc. II benefited by such Virtual Lecture for use of Free & Open Source Software (FOSS) (Name of FOSS: C & C++).

A comprehensive set of topics pertaining to C and Cpp were covered in the workshop. This training is offered by the Spoken Tutorial Project, IIT Bombay, National Mission on Education through ICT, MHRD, Govt., of India.

- Promote students to participate in like C programming University Level Competition “*Complex – 2015*” Organized by SantGadage Baba Amravati University Computer Science Teachers Association on 22Feb 2015 etc.
- Sky Observation Club with external expert Dr. Nitin Oke (NASA Educator)

### 33. Teaching methods adopted to improve student learning

- ICT enabled Lecture Methods i.e. Lectures and practical demonstration by using Power Point Presentations through Projector.
- By using Online Information / animation / Graphics.
- Seminars, Group Discussion, Question-Answer methods for making teaching Learning process interactive & effective.
- Remedial Class for Slow Learners
- Spoken Tutorial Technology uses through Free Open Source Software (FOSS). The Spoken Tutorial Project is about teaching and learning a particular FOSS like C/C++, Linux, Scilab, PHP & MySQL, Java etc. It is used for Fast Learners.

### 34.

#### **Participation in Institutional Social Responsibility (ISR) and Extension activities**

- Department also organized different training programs:
  - College Management System (CMS) Training. (for Office Staff)
  - Online Exam Form filling Training. (for Office Staff)
  - SHALARATH Pay Slip Software Training.
  - Jointly organized Head Master Training By Samaj Kalyan Officer for online Scholarship form filling.
  - Information Communication Training ( ICT ) training program for school & high – school teachers.
  
- Member of College Committee :
  - Guardian Teacher scheme
  - Sky Observation Club

### 35. SWOC analysis of the department and Future plans

- **Strength:**
  - Highly well-equipped Laboratory with required software.
  - Excellent & Consistent performance of students in university examination results.
- **Weakness:**
  - C.H.B. staff
  - Unable to start P.G. due to the University Policy
- **Opportunities:**
  - Arrange more ICT Spoken Tutorial Training workshops etc.
  - Organize Seminars, Workshop, Conference & Other competitions & also invite eminent personalities for guest lectures.
- **Challenges:**
  - Sustaining adequate knowledge for the current demand of IT sector.
  - Upgradation of Hardware as well as Software with the recent technology.
  - Management of outdated Hardware and E-waste.
- **Future Plans:**
  - To undertake Minor/Major Research Projects.
  - To organize different State/National/International level Events.
  - To establish Collaboration with reputed organization.
  - To start P.G. course & career oriented programs.



### Evaluative Report of the Electronics Department

1. Name of the department : Electronics

2. Year of Establishment : 1987

3. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) : UG-B.Sc.

Program	Subject combination	Duration
B.Sc.	<ul style="list-style-type: none"> <li>• Electronics, Physics, Mathematics</li> <li>• Electronics, Physics, Computer Science</li> <li>• Electronics, Physics, Information Technology</li> </ul>	3 years

4. Names of Interdisciplinary courses and the departments/units involved : Nil

5. Annual/semester/choice based credit system (programmewise):

Program	Annual/semester/choice based credit system
B.Sc. I, II, III	Semester

6. Participation of the department in the courses offered by other departments : Nil

7.

Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil

8. Details of courses/programmes discontinued (if any) with reasons : Nil

9. Number of teaching posts :

Teaching posts	Sanctioned	Filled
Professors	00	00
Associate Professors	01	01
Asst. Professors	02	01

10.

**Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

Name	Qualification	Designation	Specialization	No.of Years of Experience	No.of Ph.D. Students guided for the last 4 years
Shri R.G.Chavan	M.Sc.	Associate Professor	Digital Electronics, Microprocessors, Microcontrollers.	25 Years	-
Shri R.D.Chau dhari	M.Sc.,M.Phil., B.Ed.	Assistant Professor	Digital electronics, Microcontrollers.	10 Years.	-
S.S.Haral	M.Sc.NET, SET	CHB	Electronics	-	-
N.O.Chimank ar	M.Sc.NET, B.Ed.	CHB	Applied Electronics	-	-
M.M.Kulkarni	M.Sc.	CHB	Applied Electronics	-	-
J,S.Tated	M.Sc.	CHB	Embedded System	-	-

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programmewise) By temporary faculty :

Total work load			Handled by temporary faculty		%of lectures delivered and Practical classes handled	
Program	lecture	practical	lecture	practical	lecture	practical
B.Sc. UG	18	60	10	18	55.55%	30%

13. Student-Teacher Ratio (programmewise):

Session	2013-14	2014-15
Student –Teacher Ratio B.Sc.I,II,II	23:1	27:1

**14.**

**Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

Laboratory assistant		Lab.attendant	
sanctioned	filled	sanctioned	filled
01	01	02	01
Temporary support (technical) staff			01

**15. Qualification of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:**

P.G.	M.Phil	Ph.D	TOTAL
01	01	00	02

**PhD (ongoing) = 01**

CHB Faculty: PG=02, NET/SET=02, PhD (ongoing=01), PAT pass=01

**16.**

**Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil**

**18. Research Centre/facility recognized by the University: Nil**

**19. Publications:**

a) Publication per faculty

Number of papers published in peer reviewed journals (national/international) by faculty and students:

Sr. No.	Name of Faculty	Number of Paper published in index Journal	Conference
1	Shri. R.G.Chavan	--	02
2	Shri R.D.Chaudhari	01	03

**20. Areas of consultancy and income generated: Nil**

**21. Faculty as members in**

a)

National committees b) International Committees c)

Editorial Boards....

- Member Of Amravati University Electronics Teachers Association
- Member of *Society for Promotion of Excellence in Electronics* Discipline, Pune.
- Member of NUTA.

- Ex-member of BOS in Electronics.(2002-2007)

## 22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/programme: **100%**

As per the University curriculum, there is project course for B.Sc.III Semester VI Electronics subject of 20 marks in the laboratory.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

## 23. Awards/Recognitions received by faculty and students:

Name	Faculty/Student	Award	Year
Miss.Subhada Kulkarni	Student	• 1 <sup>st</sup> merit in B.Sc.Final Exam-2011 of Amravati University.	2012
		• Recipient of 2 Gold medals, 3 Silver medals.	2011
		• Color coat in research competition AVISHKAR university level.	
Miss.Sulabha Kulkarni	Student	• 2nd merit in B.Sc.Final Exam-2011 of Amravati University.	2012
		• Color coat in research competition AVISHKAR university level.	2011
Mohinder Arora	Student	• Ranked 1 <sup>st</sup> in intercollegiate university	2013

		level seminar competition.	
MandarNavghare	Student	<ul style="list-style-type: none"> <li>Ranked 1<sup>st</sup> in project competition science Pundits-2014</li> </ul>	2014

#### 24. List of eminent academicians and scientists/visitors to the department

Sr.No	Eminent academician/scientist/Visitor	Designation and department
1.	Dr,F.C.Raghuwanshi	Dean, Science faculty, S.G.B.Amravati university.
2.	Dr.D.S.Dhote	Professor & Head, Department of electronics, Brijlal Biyani College, Amravati.
3.	Dr.N.B.Raut	Associate Professor & Head, Department of Electronics, Vidyabharti college, Amravati.
4.	Dr.S.G.Shende	Associate Professor & Head, Department of Electronics, Shri Shivaji College, Akola (Ex Chairman BOS-Electronics)
5	Dr.J.S.Deshpande	Pro V.C. S.G.B.Amravati university. Amravati.
6.	Dr.S.K.Omanwar	Professor & Head, Department of physics, S.G.B.Amravati university Amravati.
7.	Dr.P.B. Raghuwanshi	Senate member, S.G.B.Amravati University.

#### 25. Seminars/Conferences/Workshops organized & the source of funding

- a) National: Nil  
b) International: Nil

**26. Student profile programme/coursewise:(2013-14)**

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc.I Sem- I	65	53	21	32	74.55
B.Sc.I Sem- II		53	21	32	88.68
B.Sc.II Sem-III	43	43	12	31	72.09
B.Sc.II Sem-IV		43	12	31	79.07
B.Sc.III Sem-V	40	40	18	22	87.70
B.Sc.III Sem-VI		40	18	22	100

\*M=Male \*F=Female

**27. Diversity of Students**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.I	100%	00	00
B.Sc.II	100%	00	00
B.Sc.III	100%	00	00

**28.**

**How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?**

Nil

**29. Student progression**

Student progression	Against % enrolled
UG to PG	30 %
PG to M.Phil.	N.A.
PG to Ph.D.	N.A.
Ph.D. to Post-Doctoral	N.A.
<b>Employed</b> • Campus selection • Other than campus recruitment	5% 15-25%

Entrepreneurship/Self-employment	2-5%
----------------------------------	------

**30. Details of Infrastructural facilities**

a) **Library:** Yes, With 79 Books.

b) **Internet facilities for Staff & Students:** Available in staff room and Laboratory.

c) **Class rooms with ICT facility:** Available in Laboratory.

**d) Laboratories: 02**

- Built up area of Dept. : 109.64 sq. m.
- Staff Room : 19.30 sq. m.
- Lab1 area : 81.61 sq. m.
- Microprocessor and : 8.73 sq. m  
Computer Lab
- Total number of equipments/apparatus: 74 (Net Worth of department Rs.954030=00)

**31.**

**Number of students receiving financial assistance from college, university, government or other agencies:**

More than 60% students receive financial assistance from govt./college/university/other agencies in the form of Scholarships, freship, prizes etc.

**32.**

**Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:**

- Guest lecture by Dr, Sadan Sapre, M.Tech. PhD, Ex-Professor, MANIT, Bhopal on 14<sup>th</sup> August 2014.
- Educational Tour at Indian Institute Of Information Technology Pune, on 20-01-2012.
- Educational /study tour 2MW Wind Power Plant at MOTHA Chikhaldara on 15.09.2012
- Educational /study tour to Van Hydro Electric Project, Wari, Telhara.
- Conduction of seminar of B.Sc.II and B.Sc.III students Using LCD Projector and power point presentation.
- Conducting assignments, class tests, project assignments and seminars regularly.

**33. Teaching methods adopted to improve student learning:**

- Interactive teaching.
- Teaching and learning using ICT technology.
- Use of Charts, Models, Instruments etc.
- Seminar and PPT Presentations are given on their topic of interest.
- Extra lectures and Practical's are engaged for solving difficulties.
- Demonstration of experiments.
- Remedial class for weak learners.

### **34.**

#### **Participation in Institutional Social Responsibility (ISR) and Extension activities:**

- N.S.S., N.C.C., PTA, IQAC etc.
- R.G.Chavan worked as program officer in N.S.S.(1992-2004)
- R.G.Chavan is in charge HOD of computer and I.T.Department
- R.D.Chaudhari working as NCC, officer.

### **35. SWOC analysis of the department and Future plans:**

#### **STRENGTH:**

1. Well Qualified and experienced teaching Staff.
2. Department and Lab. is Well Equipped with all facilities.
3. Senior and well experienced support staff.
4. Excellent Results(between 70% to 100%)

#### **WEAKNESSES:**

1. Some students from rural area with average abilities.

#### **OPPORTUNITIES:**

1. Student study electronics subject with computer science, information technology which is a rich combination.
2. To introduce Job oriented Add On courses.

#### **CHALLENGES:**

1. Competition by engineering colleges in this region.
2. To impart good subject knowledge in average students.
3. Motivating students for further study.

#### **FUTURE PLANS:**

- To introduce career oriented program in the field of Applied Electronics.
- To apply for minor/major research projects.
- To introduce certificate course in Embedded system Design.



## Evaluative Report of the Department of Language

1. **Name of the department** : Languages  
 2. **Year of Establishment** : 1970  
 3. **Names of Programs / Courses offered** :

S.No.	courses	Subjects/Subject combination	Duration
1	B.Sc.I	Any science subject combination with English and Marathi	One year
1	B.Sc.I	Any science subject combination with English and Hindi	One year

4. **Names of Interdisciplinary courses and the departments/units involved** : Nil.  
 5. **Annual/ semester/choice based credit system (programme wise)** : Semester  
 6. **Participation of the department in the courses offered by other departments** : Nil  
 7. **Courses in collaboration with other Univ., industries, foreign institutions, etc.** : Nil  
 8. **Details of courses/programmes discontinued (if any) with reasons** : Nil

### 9. Number of teaching posts

Sr. No.	Post	Sanctioned	Filled
01	Professors	--	--
02	Associate Professors	--	--
03	Asst. Professors	02 (English) Nil(Marathi) Nil(Hindi)	00 00 00
04	CHB	07(English) 02(Marathi) 01(Hindi)	07 02 01

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)**

Name	Qualification	Designation	Specialization	No. of Years of Experience
Mr. Rajesh D. Chandrawanshi	B.Com, B.A.(His) B.Ed., B.P.Ed., M.P.Ed., NET.(Phy.Ed)	Director of Physical Education <b>Incharge</b> Head of the department of languages	Physical Education & Education	02 Years Lect. in Physical Ed. College  04 Years Physical Ed. Teacher in Central School  11 Years Director Of Physical Ed.
Miss. B.S.Patil	M.A., B.Ed.	CHB	English	-
Miss. J.S. Hatekar	M.A., B.Ed.,	CHB	English	-
Miss. S.A. Lokhande	M.A., B.Ed.,	CHB	English	-
Dr. B.K. Dhore	M.A., M.Phil., Ph.D.	CHB	English	-
Mr. A. N. Wagh	M.A., M.Phil.	CHB	English	-
Mr. J.A. Gajare	M.A., NET	CHB	English	-
Mr. A.B. Khedkar	M.A.,	CHB	English	-
Dr. S.E. Rekhe	M.A., Ph.D	CHB	Marathi	-
Mr. J.B. Mohod	M.A., B.Ed.	CHB	Marathi	-
Mr. D.R. Thakur	M.A., NET	CHB	Hindi	-

- 11. List of senior visiting faculty** : Nil
- 12. Percentage of lectures delivered and percentage of practical classes handled (programme wise) by temporary faculty** : 100% by temporary faculty
- 13. Student -Teacher Ratio ( programme wise)** : (2014-15)

Subjects	English Lang.	Marathi Lang.	Hindi Lang.
Student-Teacher Ratio	63:01	187:01	66:01
No. of Students	440	374	66
Appointed	07	02	01

C.H.B.			
--------	--	--	--

14. Number of academic support staff (technical) : Nil  
and administrative staff; sanctioned and filled

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

S.No.	Teachers with highest qualification	Number
1	D.Sc./D.Litt	Nil
2	Ph.D.	1(English) 1(Marathi)
3	M.Phil.	1(English)
4	P.G.	5(English) 1(Marathi) 1(Hindi)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received :

Nil

18. Research Centre /facility recognized : Nil  
by the University

19. Publications / Paper Presentation : Nil

20. Areas of consultancy and income generated : Nil

21 Faculty as members in a) National committees) International Committees c) Editorial Boards.... Nil

22. Student projects :

a) Percentage of students who have done in-house projects including inter

departmental /programme : 100% Assignment

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

23. Awards / Recognitions received by faculty and students : Nil

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National : Nil

b) International : Nil

26. Student profile program /course wise :(2013-14)

Name of the	Applications received	selected	Enrolled		Pass percentage
			M	F	

course /program					
B.Sc.I SemI/II	400	373	106	267	80.82% (English) 98.15%(Hindi) 95.82%(Marathi)

**27. Diversity of Students (2014-15)**

Name of the Course B.Sc. I Year	% of students from the same state	% of students from other States	% of students from abroad
English	100 %	Nil	Nil
Marathi	100 %	Nil	Nil
Hindi	100 %	Nil	Nil

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? Not Applicable**

**29. Student progression (2014-15)**

Student progression	Against % enrolled
UG to PG	Not Applicable
PG to M.Phil.	Not Applicable
PG to Ph.D.	Not Applicable
Ph.D. to Post-Doctoral	Not Applicable
Employed • Campus selection • Other than campus recruitment	Not Applicable
Entrepreneurship/Self-employment	Not Applicable

**30. Details of Infrastructural facilities**

- a) Library : Books in Central Library  
b) Internet facilities for Staff & Students : Yes through N.R.C.  
c) Class rooms with ICT facility : Yes when required

d) Laboratories : Office & Staff Room  
**31. Number of students receiving financial assistance from college, university, government or other agencies : 60% Students.**

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts : Nil.**

**33. Teaching methods adopted to improve student learning**

- i) Seminar by students using Power Point Presentation
- ii) Group Discussions
- iii) Remedial coaching for weak learner students
- iv) Assignments and projects
- v) Class tests and internal exams

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

Department actively participates in different Institutional Activities:

- College Class Test
- University Examinations
- College Function
- College Magazine
- Sports Adventure Activity

**35. SWOC analysis of the department and Future plans**

- Strength - Ready to develop communication skill among students.  
Good results
- Weakness - No permanent staff
- Opportunity - To develop grammar related to competitive examinations
- Challenge - Encourage Students for communicate in proper grammatically based languages.
- Future Plans -
  - A. Language Lab.
  - B. Try for permanent faculty members.
  - C. To organize Seminar, Conference or Workshop

## Evaluative Report of the Department Mathematics

1. Name of the department : Mathematics  
 2. Year of Establishment : 1970 (UG), 1974 (PG)

3.

**Names of Programs/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

S.No	Courses	Subjects /Subject combination	Duration of courses
1	B.Sc.I ,II,III	P1: Physics, Electronics, Mathematics	3 Years
2		P2: Physics, Computer Science, Mathematics	
3		P4: Physics, Chemistry, Mathematics	
4		P6: Physics, Information Technology, Mathematics	
5	M.Sc.I ,II	Mathematics	2 Years
6	Ph.D.	Mathematics	-

4. Names of Interdisciplinary courses and the departments/units involved- Nil

5. Annual/semester/choice based credits system (programmewise)

S.No	Courses	Annual /Semester/CBCS
1	B.Sc.I, II, III	Semester
2	M.Sc.I, II	Choice Based Credit System

### 6. Participation of the department in the courses offered by other departments

Teaching Staff of the department participates in teaching some units of the course offered by department of Bioinformatics

7.

**Courses in collaboration with other universities, industries, foreign institutions, etc.** Nil

8. Details of courses/programs discontinued (if any) with reasons Nil

### 9. Number of Teaching posts

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	2	2

Asst.Professors	4	2
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**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

Name	Qualification	Designation	Specialization	No.ofYears of Experience	No.ofPh.D. Students Guided for the last4years
Dr.S.M.Padhye	M.Sc. Ph.D.	Associate Professor	Functional Analysis, Topology	33	6
Shri. V.L.Ruiwale	M.Sc. M.Phil.	Associate Professor	Differentiable manifolds	33	-
Dr. S.W.Bhaware	M.Sc. Ph.D. B.M.Ed.,NET	Assistant Professor	Algebra ,Theory of Relativity	14	-
Miss S.B.Tadam	M.Sc. M.Phil.	Assistant Professor	Functional Analysis, Topology	5	-
Miss P.P.Umarkar	M.Sc.	C H B	Topology	-	-
Miss S.A.Manadhan	M.Sc..	C H B	-	-	-
Miss S.S.Mhaske	M.Sc..	C H B	-	-	-
Miss Asma Fatima	M.Sc.	C H B	-	-	-
Miss S.R.Bajaj	M.Sc.	C H B	-	-	-

**11. List of senior visiting faculty** Nil

**12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty**

Sr. No.	Name of Programme	Total Workload	Workload handled by temporary teacher
1	B.Sc. I	27	25
2	B.Sc. II	15	8
3	B.Sc.III	13	4
4	M.Sc. I	37..5	7.5

5	M.Sc. II	37.5	7.5
		130	52 (40%)

**13. Student-Teacher Ratio(programwise): (2013-14)**

S.No.	Program	Student teacher ratio
1	UG	38:1
2	PG	24:1

**14.**

**Number of academic support staff (technical) and administrative staff sanctioned and filled Nil**

**15. Qualifications of teaching faculty with D.Sc./D.Litt/Ph.D/MPhil/PG.**

S.No.	Teachers with highest qualification	Number
1	D.Sc./D.Litt	Nil
2	Ph.D.	2
3	M.Phil.	2
4	P.G.	5

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received Nil**

**17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received**

S.No.	Name of the faculty	Type of project	Title of project	Funding Agency	Amount & Duration
1	Dr.S.W.Bhaware	Minor Research Project	Mathematical Study of Plane Gravitational Waves in Generalized Peres Space Time	UGC	40000/- Sept 2009 to April 2012

**18. Research Centre/facility recognized by the University**

- **Dr .S. M. Padhye, Associate Professor has been registered as guide by S.G.B.Amravati University to supervise the students for M.Phil/ Ph.D. since 1994.**

**19. Publications(2010-2015):**

a) Publication per faculty



Number of papers published in peer reviewed journals (national/international) by faculty and students

Sr.No.	Name of the faculty	Number of papers published in peer reviewed journals	Number of papers presented in conferences /seminars	Number of chairmanships held in conferences /seminars
1	Dr.S.M.Padhye	8	4	2
2	V.L.Ruiwale	-	1	-
3	Dr. S.W.Bhaware	6	4	-
4	Ku. S.B.Tadam	2	2	-
5	Ku. P.P. Umkar	1	-	-

**20. Areas of consultancy and income generated : Nil**

**21. Faculty as members in**

a) National committees b) International Committees c) Editorial Boards....

Sr. No.	Name of Faculty	Organization/Association	Post held/Status
1	Dr. S. M. Padhye	1. Indian Mathematical Society 2. Indian Science Congress Association 3. Nagpur University Teachers Association	Life member
2	Dr. S. W. Bhaware	International Journal of Mathematical Sciences and Engineering Applications (IJMSEA)	Life member
3	Mr. V. L. Ruiwale	Nagpur University Teachers Association	Life member
4	Ku. S. B. Tadam	Indian Science Congress Association	Life member

**22. Student projects**

a) Percentage of students who have done in-house projects including interdepartmental/program: 100%

b)Percentageofstudentsplacedforprojectsinorganizations  
outsidetheinstitutioni.e.inResearchlaboratories/Industry/ otheragencies: Nil

### 23.Awards/Recognitionsreceivedbyfacultyandstudents

- Dr. S. M. Padhye**Two** students awarded Ph.D.(2010-15)  
**Four** students working for Ph.D.(2014-15)
- Dr. S. W. Bhaware**VidyaBhushan** Award by INSA (2010)  
**Ph.D.** in 2013-14

S.No	Name of the student	Name of the event	Prize /Award
1	Ku.AnjaliTrivedi ( M.Sc.II)	University level seminar competition for PG students held at Amravati (2010-11)	Second Prize
2	Ku.Neha Sharma (M.Sc.II)	University level seminar competition for PG students held at Amravati (2011-12)	Second Prize
3	Ku. Asma Fatima (M.Sc.II)	University level seminar competition for PG students held at Akola (2012-13)	First Prize
4	Ku.SonaliDhawal e (M.Sc.I)	University level seminar competition for PG students held at Washim(2012-13)	Third Prize
5	Ku..Jagruti Sharma (M.Sc.I)	University level seminar competition for PG students held at Amravati (2013-14)	Second Prize
6	Ku.GauriWadhod kar (B.Sc.I)	University level seminar competition for UG students held at Chikhali (2012-13)	Second Prize
7	PrathmeshLajurka r (B.Sc.I)	University level seminar competition for UG students held at Akola (2010-11)	First Prize
8	Ku.Bhuvaneshwa riWankhede	B.Sc. in S.G.B.A.U (2013- 14)	Ninth Merit

### 24.Listofeminentacademiciansandscientists/visitorsstothedepartment(20 10-15)

Sr. No.	Eminent Academicians/ Scientists/visitors	Designation
1.	Dr. Rajiv Gawai	J C Bose National Fellow and Senior Professor TIFR Mumbai
2.	Dr. S. K. Pande	Vice Chancellor, Pt. RavishankarShukla University,

		Raipur.
3.	Dr. K. S. Adhao (D.Sc)	Professor and Head, Department of Mathematics, S.G.B.A.U. Amravati.
4.	Dr. Mrs. A. S. Gudadhe	Associate Professor & Head, Dept. of Mathematics, Govt. Vidarbha Institute of Science and Humanities, Amravati.

**25. Seminars/Conferences/Workshops organized & the source of funding**

- a) National: Two days National conference on “Developing Frontiers of Physics, Astronomy and Space Sciences” was held on 24<sup>th</sup> and 25<sup>th</sup> September 2010. Source of Funding : i] University Grants Commission  
ii] College Management

**26. Student profile program/coursewise (2013-14)**

Name of the Course/program (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I Sem I/II	140	137	67	70	77.42% / 64.75%
B.Sc. II Sem III/IV	98	98	40	58	63.92% / 61.86%
B.Sc. III Sem V/VI	47	47	23	24	63.04% / 89.36%
M.Sc. I Sem I/II	160	90	18	72	6.74% / 45.34%
M.Sc. II Sem III/IV	52	52	17	35	21.15% / 15.38%

\*M=Male \*F=Female

**27. Diversity of Students (2014-15)**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc. I	100%	0	0
B.Sc. II	100%	0	0

B.Sc.III	100%	0	0
M.Sc. I	97.8%	2.2%	0
M.Sc.II	98.77%	1.23%	0

**28.**

**How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services :-**

- NET/SET –One, Defense - one

**29. Student progression (2014-15)**

<b>Student progression</b>	<b>Against % enrolled</b>
UG to PG	30 to 50 %
PG to M.Phil.	Not Applicable
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
<b>Employed</b> • Campus selection • Other than campus recruitment	
Entrepreneurship/Self-employment	

**30. Details of infrastructure facility**

a) **Library:** Departmental Library with Number of books = 162  
(Degree College = 99, UGC = 53, Jr. College = 10)

b) **Internet facility for staff & students :**

**Internet facility is available for staff in the department and for the students in UGC NRC in the central Library**

c) **Class rooms for P.G. Classes : Two**

d) **Department Room/Staff room : one**

e) **Class rooms with ICT facility : one**

d) **Laboratories : Not Applicable**

**31. Number of students receiving financial assistance from college, university, government or other agencies**

Number of scholarship holders : Government - **More than 60%**

**32.**

**Details on student enrichment programs (special lectures/workshops /Seminar) with external experts**

Sr.No.	Name of Event	Date

1.	Two days National conference on Development Frontiers of Physics Astronomy and Space Sciences	24.9.2010 & 25.9.2010
2.	University Level Seminar Competition for P.G. students On Complex Analysis	9.3.2013

### 33. Teaching methods adopted to improve student learning

- i) Seminar by students using Power Point Presentation
- ii) Group Discussions
- iii) Remedial coaching for weak learner students
- iv) Assignments and projects
- v) Class tests and internal exams

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- i) The teaching staff prepares the students for participation in UG / PG level seminar competitions held at this/other colleges.
- ii) The teaching staff has taken part in several extension activities. (2010-15)

S.No.	Name of the teacher	Name of the event
1	Dr.S.M.Padhye, Dr.S.W.Bhaware Ku.S.B.Tadam	Invited talks in Orientation Course on Content Enrichment & Pedagogy For TGT Mathematics (3.5.13-8.5.13) at JawaharNavodayaVidyalaya ,AKOLA
2	Dr.S.M.Padhye	Invited talk in 77 <sup>th</sup> Indian Mathematical Society Conference held at Swami RamanandTirthMarathwadaUniversity,Nanded (27.12.11-30.12.11)
3	Dr.S.M.Padhye	Invited talk on "Real Analysis" held at ShriShivaji college ,Akot,Dist Akola (21.2.14)
4	Dr.S.M.Padhye	Invited talk in ISTE approved STTP Program on Use of Mathematical Softwares and Fundamentals for Engineering Multidisciplinary Applications held at HVPM College of Engineering ,Amravati ( 6.6.11)
5	Dr.S.W.Bhaware	Invited talk in CSIR sponsored National Symposium on Number Theory & related topics held at Mahan ( 15.1.13-16.1.13)

6	Dr.S.W.Bhaware	Invited talk in Workshop on “Recent Trends Of Teaching in Mathematics held at Mangrulpir Dist.Washim (10.8.2010-11.8.2010)
7	Shri.V.L.Ruiwale	Lecture on Shares and financial market at Rotary club of Akola on 18.11.2013
8	Dr.S.W.Bhaware	Worked as judge in” Inspire Award District Level Science Exhibition” held at Akola (8.8.12-10.8.12)

35. SWOC analysis of the department and future plans

**Strengths:**

- i) Well qualified and capable staff
- ii) UGC financed NET/SET Coaching center
- iii) The only department in the university with granted P.G.since 1974.

**Weaknesses:**

- Inadequate staff to handle total workload of UG & PG both

**Opportunities:**

- i) Scope for higher education
- ii) job opportunities in colleges, industries
- iii) scope for self-employment,
- iv) Preparation for NET/SET

**Challenges:**

- i) Enhancement of interest in Mathematics
- ii) Improvement of results in Mathematics for UG/PG students
- iii) Promotion of interest in mathematical research

**Future Plans:**

- i) To undertake Major & Minor research projects
- ii) To enhance the activities of NET/SET coaching
- iii) To organize state level seminar competitions
- iv) To establish a study circle in Mathematics amongst PG students, research scholars & teaching staff
- v) To prepare question bank & answer bank for NET/SET Examinations
- vi) To make the mathematical software such as Maple Mathematica, MatLab, Scilab etc. available to the students

## Evaluative Report of the Department of Microbiology

1. Name of the department: MICROBIOLOGY  
 2. Year of Establishment UG 1983; PG 2011  
 3. Names of Programmes/Courses offered: UG, PG and Ph.D.

Programme	Subject/Course	Duration
B.Sc.	B1- Microbiology/Biochemistry/Chemistry B2- Microbiology/Biochemistry/Botany B3- Microbiology/Zoology/Chemistry	3 Years.
M. Sc.	Microbiology	2 yrs.
Ph.D.	Microbiology	-

4. Names of Interdisciplinary courses and the departments/units involved: Nil

5. Annual/semester/choice based credits system (programmewise) :-  
 UG- SEMESTER, PG - CBCS

Programme	Annual/Semester/CBCS
B.Sc. I/II/III	Semester
M. Sc. I/II	CBCS
P.h.D.	-

6. Participation of the department in the courses offered by other departments :  
 Nil

7.

Courses in collaboration with other universities, industries, foreign institutions, etc. Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

### 9. Number of Teaching posts

	Sanctioned	Filled
Professors	00	00
Associate Professors	02	02

Asst.Professors	04	00
-----------------	----	----

**10.**

**Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

<b>Name</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No.of Years of Experience</b>	<b>No.of Ph.D. Students guided for the last 4 years</b>
Dr. V.D. Nanoty	M.Sc. Ph.D.	Principal	Microbiology	29	08
Dr. U.K. Bhalekar	M.Sc. Ph.D	Associate Professor &	Microbiology	30	--
CHB for UG	Total 10				
CHB for PG	Total 08				

**11. List of Senior Visiting faculty.**



## 12.

**Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty: UG -75% PG -83%**

Name of CHB Lecturer	B.Sc. I		B.Sc. II		B.Sc. III		Total No. of Periods
	Sem I/II	Practical	Sem III/IV	Practical	Sem V/VI	Practical	
Dr. V. D. Nanoty	--	06	--	--	--	--	06
Dr. U. K. Bhalekar	02	--	--	06	02	12	22
Ku. P. M. Sharma	--	--	06	--	--	--	06
Dr. H. S. Malpani	02	06	--	--	03	---	11
Ms. A. A. Gawali	02	--	--	06	--	--	08
Mrs. N. V. Khanwalkar	--	06	--	--	01	--	07

Sr. No.	Name of Senior Visiting	Designation	Name of college of Visiting Faculty	Year of experience
1	Dr. M. Musaddiq	Associate Professor	HOD, Department of Microbiology, ShriShivaji College, Akola.	30 years
2	Dr. Archana S. Pethe	Associate Professor	Department of Microbiology, ShriShivaji College, Akola.	29 years
3	Dr. Nikhilesh S. Kulkarni	Associate Professor	HOD, Department of Microbiology, R.A College, Washim.	16 years
4	Dr. A. R. Deshpande,	Associate Professor	HOD, Department of Microbiology, ShriShankarlalKhandelwal College, Akola	16 years
5	Dr. D. S. Bhokare,	Associate Professor	Department of Microbiology, ShriShankarlalKhandelwal College, Akola	15 years
6	Dr. Z. H. Khan,	Associate Professor	HOD, Department of Biochemistry, ShriShivaji College, Akola.	30 years
7	Dr. Anil M. Garode	Professor	Department of Microbiology, ShriShivaji College, Chikhali	29 years

Ku. Khushboo Virwani	--	--	--	06	--	--	06
Ku. Deptishree Yadav	--	--	--	--	--	06	06
Ku. Ashwini Kalmegh	--	--	--	--	--	06	06
Ku. Rupali Khanherkar	--	06	--	--	--	--	06
Ku. Mayuri Gujrati	--	--	--	06	--	--	06
Ku. Monika Butole		06	--	--	--	--	06
Total	06	30	06	24	06	24	96

**13. Student-Teacher Ratio (programmewise) : UG 225 : 13 (17:1); PG 32 : 6,(5:1)**

Class	No. Of Students	Periods		Total
		Theory	Practical	
M.Sc. I	16	16	16*2 = 32	48
M.Sc. II	16	16	16*2 = 32	48
Total	32	32	64	96

Name of CHB Lecturer	M.Sc. I		M.Sc. II		Total No. of Periods
	Theory	Practical	Theory	Practical	
Dr. V. D. Nanoty		08	--	--	08
Dr. U. K. Bhalekar		08	--	08	16
Dr. H. S. Malpani	04	08	04	08	24
Ms. A. A. Gawali	04	--	04	08	16
Ms. P. R. Chitlange	04	--	04	--	08
Mr. S. R. Mhatre	04	--	--	08	12
Mrs. N. V. Khanwalkar	--	08	04	--	12
Total	16	32	16	32	96

**14.**

**Number of academic support staff (technical) and administrative staff; sanctioned and filled : Sanctioned 03 and Filled : 03**

Sr. No.	Name	Designation	Year of Service
1	Shri G. K. Wankhede	Lab Attendent	30
2	Shri A. D. Gawali	Lab Attendent	30
3	Shri S. S. Solanki	Lab Assistant	20
4	Daily Wages (UG)	01	--
5	Daily Wages (PG)	01	--

**15. Qualification of teaching faculty with Ph.D.: 03**

Sr. No.	Name	Designation
1	Dr. V. D. Nanoty	Principal
2	Dr. U. K. Bhalekar	Head of Department
3	Dr. H. S. Malpani	Contract Basis Lecturer

**16.**

**Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

One Minor Research Project (2,00,000/-) One Major Research Project (9,79,800/-) from UGC

Sr. No.	Name	Topic	Fund	Year
1	Dr. V. D. Nanoty	“Analysis.....diseases” (UGC Delhi)	9,79,800/-	2013
2	Dr. U. K. Bhalekar	“In-Vitro....skin diseases” (Pune Maharashtra)	2,00,000/-	2013

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: UGC 11,79,800**

Sr. No.	Name	Topic	Fund	Year
1	Dr. V. D. Nanoty	“Analysis.....diseases” (UGC Delhi)	9,79,800/-	2013
2	Dr. U. K. Bhalekar	“In-Vitro....skin diseases” (Pune Maharashtra)	2,00,000/-	2013

**18. Research Centre/facility recognized by the University: YES; 01**

Sr. No.	Name	Designation	Lab
1	Dr. V. D. Nanoty	Supervisor	Microbiology

Department	Intake Capacity	Ph.D. Award	Thesis Submitted	Registration
Microbiology	05	03	01	04

### 19. Publications:

a) Publication per faculty

Dr. V.D. Nanoty: 22

Dr. U. K. Bhalekar: 08

Name of Faculty	Publication National/ International	Paper Presented/ seminar/Conference/Workshop	Citation Index	Impact Factor
Dr. V.D. Nanoty	22(8)	63 (26)	--	0.8215
Dr. U. K. Bhalekar	8(5)	24(20)	--	0.8215
CHB (UG/ PG)	08	26	--	--

- Number of papers published in peer reviewed journals (national/international) by faculty and students : 31
- Impact factor- One paper with Impact Factor 0- 0.8215

### 20. Areas of consultancy and income generated – Biofertilizer: Rs 2000

Generated and utilized for departmental activity

Sr. No.	Name of consultancy	Fund	Year
1	Bio-fertilizers	2000	2011-onwards
2	Microphotography	----	2011-onwards
3	Antibiotic Sensitivity	----	2011-onwards

### 21. Faculty members in

a) National committees: 02 Dr. V.D. Nanoty, Dr. U.K. Bhalekar Association of Microbiologist of India (1368/2001)

b) International Committees

Boards....

Sr. No.	Name	committees	Year/ Id. No.
1	Dr. V.D.	1) Association of	Life

	Nanoty	<p>Microbiologist Society, India</p> <p>2) NUTA</p> <p>3) Chief Organizer</p> <p>4) Member of Board of Studied(2)</p> <p>5) Chairman in International Conference</p> <p>6) Patron in international conference, Sevadal College</p> <p>7) Member of Principal Forum, Amravati Chapter</p> <p>8) Invitee member</p> <p>9) Life Member</p>	<p>Membership</p> <p>Life Membership</p> <p>State Level Microbiology Students Summit 2013 SGB Amravati University, Amravati</p> <p>GNA College, Barshitakli</p> <p>Sevadal college Nagpur</p> <p>SGB Amravati University, Amravati</p> <p>The B. G. E. Society Nature Pollution and Research</p>
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2	Dr. U.K. Bhalekar	1) Association of Microbiologist Society, India  2) NUTA  3) Organizing Secretary  4) Coordinator  5) Invitee (member teaching staff)	2001/1368 Life Membership  Life Membership  State Level Microbiology Students Workshop 2013( Swami Vivekanand)  The B. G. E. Society
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### 22. Student projects

A) Percentage of students who have done in-house projects including interdepartmental/programme

UG – 100 %; PG -100%

Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies – NIL

### 23. Awards/Recognitions received by faculty and students

Sr. No.	Name of Awardees	Award	Year
1	Faculty	06	2011-2015
2	Student	18	2011-2015

Sr. No	Name of Awardees	Award	Year
	Dr. V.D. Nanoty	VidyaSarswatiPuraskar	2009-10
	Ms. A.B. Banole	Ph.D. SGBA Amravati	2010-11
	Ku. Rupali Narayan More	Merit 9 SGBA Amravati	2011-12
	Ku. Ankita R. Kabra	Inspire (4,00,000)	2011-2012
	Ku. Manju. N. Pariyani	Inspire (4,00,000)	2011-2012
	Ku. Abhilasha Deshmukh, Ku. Rasika Udapure & Ku. Maithili Deshmukh	State Level Micro Quiz Competition (Second & Third Prize)	2012-13
	Ms.	Award of Excellency	2012-13

	AbhilashaDeshmukh		
	Dr. H. S. Malpani	Ph.D. SGBA Amravati	2012-13
	Ku. RasikaUdapure, Ankita Sharma &AkshayShriwas	Aviskar	2013-14
	Mr. S R Mhatre	State Level Quiz And Poster Competition Nagpur	2014-2015
	Dr. U.K. Bhalekar	Ph.D. SGBA Amravati	2014-2015
	Ms. Priti Sharma Mr. SandipToshniwal	Aviskar/ Anvention	
	Ku.PoojaBalode DiptishreeYadav	2 <sup>nd</sup> Merit 3 <sup>rd</sup> Merit in S.G. B. Amravati University in M.Sc.	2014-2015
	Ku. AnkitaKabra	5 <sup>rd</sup> Merit in S.G. B. Amravati University in M.Sc.	2014-2015

24. List of eminent academicians and scientists/visitors to the department

**25. Seminars/Conferences/Workshopsorganized&thesourceoffunding**

Sr. No	Name of academiciansands cientists/visitors	Designation	Name of college of Visiting Faculty
1	Dr. P. R. Thorat	Associate Professor & HOD.	P G. Dept of Microbiology & Research Centre, Shivaji College, Barshi
2	Dr. P. S. Wakte	Associate Professor & HOD.	Dept of Microbiology, Dnyanopasak College, Parbhani
3	Dr. A. M. Deshmukh	Professor & HOD.	Dept of Microbiology, BAMU, Aurangabad.
4	Dr. C. N. Khobragade	Associate Professor	S. R. T. M. University, Nanded.
5	Dr. C. S. Chandekar	HOD	Dept of Microbiology ShriShivaji Science College, Nagpur
6	Dr. A. V. Manwar	Associate Professor	P.G Dept of Microbiology, DSM College, Parbhani
7	Dr. Kapil D. Kamble	Associate Professor	Dept of Microbiology, S. G. B. Amravati University Amravati
8	Dr. A. B. Ingle	Associate Professor	Dept of Microbiology, S.K. Porwal College Washim.
9	Dr. Bhodhankar	Dean	BhartiVidyapeet Pune
10	Dr. A. V. Gomashe	Registrar	RMT University, Nagpur

State Level Microbiology Students Summit on Pure Water for Better Health  
on 10/10/ 2013

- a) National- Nil  
b)International- Nil

**26. Studentprofileprogramme/coursewise: 2013-14**



Nameofthe Course/programme	Applications received	Selected	Enrolled		Pass percentage
			M	F	
B.Sc I Sem I	222	78	8	70	80.77%
Sem II	75	75	7	68	89.33%
B.Sc II Sem III	65	65	7	58	58.46%
Sem IV	65	65	7	58	72.31%
B.Sc III SemV	55	55	6	49	87.27%
Sem VI	55	55	6	49	83.64%
M.Sc. I Sem I	16	16	02	14	93.75%
Sem II	16	16	02	14	93.75%
Ph.D	--	05		--	---

### 27. Diversity of Students

Nameofthe Course	%of students fromthe samestate	%ofstudents fromother States	%of students from abroad
B.Sc.	100%	0%	%
M.Sc.	100%	0%	0%
Ph.D	100%	0%	0%

### 28.

Howmanystudentshaveclearednationalandstatecompetitiveexaminations such asNET,SLET,GATE,Civilservices,Defenseservices,etc.?

PAT – 03

Sr. No.	Name	PAT	Year
1	Ku. PoojaBalode	SGB Amravati University, Amravati	2013-2014
2	Ku. DiptishreeYadav	SGB Amravati University, Amravati	2013-2014
3	Ku. Shumela Patel	SGB Amravati University, Amravati	2013-2014

### 29. Student progression

Student progression	Against % enrolled
UGtoPG	2009-10 – 32-50 % 2010-11 – 32-50 % 2011-12 – 32-50 % 2012-13 – 32-50 % 2013-14 – 32-50 %
PGtoM.Phil.	Nil
PGtoPh.D.	Nil
Ph.D.toPost-Doctoral	Nil
Employed • Campus selection • Other than campus recruitment	Nil  10 -20%
Entrepreneurship/Self-employment	20 -30%

### 30. Details of Infrastructural facilities

#### a) Library: YES

Books and Journals (128) and 3 journals.

#### b) Internet facilities for Staff & Students: YES

#### c) Class rooms with ICT facility: YES

#### d) Laboratories: 02

Facility	Instrument	Rooms	Laboratories	Aseptic Room
Staff (Teaching Non- Teaching And CHB)	Dextop, Laptop, LCD Projector, Digital Camera, Internet Wi- Fi	Staff Room  Non- Teaching Staff Room	02	01 (Laminar Air Flow)
Student	Desktop, Laptop, LCD Projector, Digital Camera, Internet Wi- Fi	UG 3 Rooms PG 2 Rooms 1 Class room with ICT	02	01 (Laminar Air Flow)

### 31.

Number of students receiving financial assistance from college, unive

**rsity, Government or other agencies:**

- More than 70%  
Student receiving financial assistance from college, university,  
government or other agencies.

Name	scholarship	Amount	Year
Ku. Ankita Kabra	Inspire	4,00,000/-	2011-2012
Ku. Manju Pariyani	Inspire	4,00,000/-	2011-2012
Ku. Abhilash Deshmuk	Excellency Award	10,000/-	2013-2014

**32.****Detail on student enrichment programmes (special lectures/workshops/seminar) with external experts Workshop 01 ; Special lectures 04)**

Sr. No.	Workshop	Special Lecture	Educational tour	No. of Project work	Project work	Industrial Visit	Year
1	01	10	08	36 208	Dissertation (M.Sc.)  Pathology (CCLT/DC LT/ADCLT)	04	2011 - 2015

**33. Teaching methods adopted to improve student learning:**

- ICT, Power Point, Seminar, Chart, Instrument, Remedial Coaching, Virtual class room, Extension work, Project work

**34. Participation in Institutional Social Responsibility (ISR):**

Dr. V. D. Nanoty:

Dr. U. K. Bhalekar:

- Science Exhibition
- Blood Donation/ Grouping ( Department of Microbiology & Biochemistry)
- IQAC Participation
- Examination ( University/ YASHADA/MPSC/BANKING/ IBPS )
- Chair Person Nation Seminar
- Judge In National Seminar
- Ex. NCC Officer worked as Caption up to 2012
- NSS/ NCC Participation
- Organizing Secretary State Level Microbiology Summit 2013
- Co-coordinator (University Level)
- Participation in sports Activities

Extension activities

- Involved in Bio-fertilizer Formation
- Blood donation camp
- Water testing
- Antibiotic sensitivity testing.

### 35. SWOC analysis of the department and future plans

- 3) **Strength:** Principal of college belong to department of Microbiology, Dedicated Faculty Members, Laboratory recognized for Research work, Subject having Demand amongst students, UG and PG students can create awareness about health and hygiene, Strong Research Work For Society, Memorandum of understanding with Dr. PDKV Akola, Dr. Hedgewar Blood Bank Akola, ShriShivaji Science College Akola, Microbiologist Society of India, Adarsh Go SevaMhaispur, Jain AerigationJalgaon. Linkage, Microbial Type Culture Collection, Chandigarh, Hi Media Mumbai, Bio-era Pune, Excelris Biogenesis, Ahmemdabad, Every Year admissions are strictly on merit list, Dr. V. D. Nanoty working as a principal of our college.
  - 4) **Weakness:** Delay of Appointment Procedure by the changing Government policies.
  - 5) **Opportunity:** More Researchers can be produced from lab who can contribute to society; Self employment can be increased by establishing pathology Labs, To get the Job in various Scientific Institutes, Industries, Consultancies ( Government And Non Government job), May Fly to Abroad for their future prospects
  - 6) **Challenges:** Retaining the unique character of the Department in an increasingly consumerist society poses a great challenge to the ideals the institution upholds
  - 7) **Future Plan:**
    - 4) To Establish Charitable pathology(Microbiology) Laboratory for Poor peoples in Society
    - 5) To organize National & International Conferences/Workshop
    - 6) To motivate the students for NET,SET GATE,DST,CSIR Examinations
    - 7) To motivate the UG and PG students for various scholarships from central and state government.
- **Any Others:**

#### Memorandum of understanding with

- d) Dr. PDKV Akola
- e) Dr. Hedgewar Blood Bank Akola
- f) ShriShivaji Science College Akola
- g) Microbiologist Society of India
- h) Adarsh Go SevaMhaispur
- i) Jain AerigationJalgaon

#### Linkage

- j) Microbial Type Culture Collection, Chandigarh
- k) Hi-Media Mumbai
- l) Bio-era Puna
- m) Excelris Biogenesis, Ahmemdabad

## Evaluative Report of Department of Physics

1. **Name of Department** : Physics
2. **Year of establishment** : 1<sup>st</sup> April 1970
3. **Names of programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)** : UG
4. **Names of Interdisciplinary courses and the departments / units involved** : Nil  
But there are combinations of different subjects with parent one.  
P1: Phy/ Maths/ Ele  
P2: Phy/ Maths/ CPS  
P3: Phy/ Ele / CPS  
P4: Phy/ Chem/ Maths  
P5: Phy/ Ele/ IT  
P6: Phy/ Maths/ IT
5. **Annual / semester / choice base credit system (programme wise)** : Semester Pattern
6. **Participation of the department in the courses offered by other departments** : Nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.** : Nil
8. **Details of courses / programmes discontinued (if any) with reasons** : Nil

### 9. Number of Teaching posts

	Sanctioned	Filled
Professors	00	00
Associate Professors	00	00
Asst. Professors	08	01

### 10. Faculty profile with name, qualification, designation, specialization, (D.Sc/ D.Litt. / Ph.D./ M.Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D students guided for the last 4 years
Shri. M. S. Tapi	M.Sc. B.EdSanskri BhashaVisharad	HonoraryH OD	Electronics & Solid State Physics	40	Nil
Shri. P. P. Gedam	M.Sc., SET	Asst. Prof.	Condensed Matter Physics	7	Nil

Shri. R. K. Shirsath	M.Sc., NET	CHB Teacher	Condensed Matter Physics	1	Nil
Shri. J. L. Manputra	M.Sc., B.Ed.	CHB Teacher	Electronics & Solid State Physics	6	Nil
Ku. V.S. Karale	M.Sc., B.Ed	CHB Teacher	Electronics	6	Nil
Ku. P.M. Sagane	M.Sc., B.Ed	CHB Teacher	Condensed Matter Physics	3	Nil
Ku. M. R. Ingle	M.Sc., B.Ed.	CHB Teacher	Condensed Matter Physics	3	Nil
Ku. N.N. Pachpor	M.Sc., B.Ed.	CHB Teacher	Solid State Physics	3	Nil
Shri. H. P. Ingle	M.Sc.	CHB Teacher	Condensed Matter Physics	2	Nil
Ku. M. R. Bhojapure	M.Sc.	CHB Teacher	Condensed Matter Physics	2	Nil
Ku. S. P. Wadekar	M.Sc., B.Ed.	CHB Teacher	Material Science	2	Nil
Ku. M. A. Shaikh	M.Sc	CHB Teacher	Condensed Matter Physics	1	Nil
Ku. R.A. Abhyankar	M.Sc.	CHB Teacher	Material Science & Energy Studies	1	Nil

11. List of senior visiting faculty :- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise ) by temporary faculty

Theory :- 95 %

Practicals :- 88 %

13. Student – Teacher ratio (programme wise)

Student – Teacher ratio
37 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Nature of post	Sanctioned	Filled
Administrative staff	01	01
Academic support staff	07	07

**15. Qualification of Teaching faculty with D.Sc / D.Litt / Ph.D/ M.Phil / PG**

Qualification	No. Of Faculty
PG, SET/NET	02
PG	11

**16. Number faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil**

**17. Departmental projects funded by DST – FIST; UGC, DBT, ICSSR, etc. And total grant received : Nil**

**18. Research Center / facility recognised by the university : Nil**

**19. Publications :**

a) Publication per faculty

Sr. No.	Name of Faculty	Paper in conference/ workshop/ seminar Entitle	ISSN No.	Venue.	Date
1	Shri. M. S. Tapi	“Can The Law of Physics Change”	----- -	Shri. R. L. T. Science College , Akola	24 & 25, Sept. 2010
1	Mr. P. P. Gedam	“Linear optical studies of L- Arginine Suface Modified CuONanoparticals ”	Print :ISSN 2393-8188 Online :ISSN 2393-8196	Miliya College , Beed.	23 & 24, Dec. 2014

**20. Area of consultancy and income generated : Nil**

**21. Faculty as members in**

a) National committees

- Mr. P. P. Gedam is a member of Indian Association of Physics Teachers (IAPT)

b) International committees : Nil

c) Editorial Boards..... : Nil

**22. Student projects**

a) Percentage of students who have done in-house projects including inter departmental / programme

: 100 %

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industries / other agencies :

Nil

**23. Awards / Recognitions received by faculty and students :**

<b>Sr. No.</b>	<b>Name of Student</b>	<b>Name of Award</b>	<b>Venue</b>	<b>Year</b>
1	Shri. Mohd. AsifMohd. Saleh	1 st prize in University level seminar competition in physics	S. K. R. Innani college , Karanja Lad run by Viddyabharati Education Society, Amravati	2011 - 2012
2	Shri. PrathameshLajurkar	II nd prize in University level seminar competition in physics & Ist prize in Quiz competition in physics	J. B. Science college, Wardha	2011 – 2012
3	Miss. SulbhaKulkarni	I st Merit in B.Sc.Exam.2011 of SGB Amravati University.		2011 - 2012
4	Miss. ShubhadaKulkarni	II nd Merit in SGB Amravati University.		2011 – 2012
5	Miss. Farheen Bashir Maniyar	INSPIRE Scholarship of Rs. 400000/- for last five years. Awarded by Department of Science & Technology. (DST).		2011 - 2012
6	Shri. DnyaneshwarShrikrushnaThombare	INSPIRE Scholarship of Rs. 400000/- for		2011 - 2012



		last five years. Awarded by Department of Science & Technology. (DST).		
7	Miss. GauriKiranWathodkar	Colour holder in Avishkar  Secured I st prize in National level Technical festival  Ist rank in National level paper presentation competition in “Technomanth n”	Engineering College, Washim  Engineering College, Dhamangao n	2012 – 2013  2012 - 2013
8	Miss. BhuvaneshwariWankhade	IX th merit in B.Sc. exam of SGB Amravati University.		2013 – 2014

**24. List of eminent academicians and scientists / visitors to the department**

<b>Sr. No.</b>	<b>Name of scientist/guest lecture</b>	<b>Institute</b>	<b>Date</b>	<b>Topic/ Interaction</b>
1	Prof. Rajeev Gawai Scientist	TIFR, Mumbai	Sept.24, 2010	Inspiring Lecture on Bigbang& Galaxies
2.	Prof. S.K. Pande Vice-Chancellor	Ravishankar University, Raipur	Sept. 24, 2010	Inspire students through interaction
3	Prof. SriramjiShastri	Dept. of Physics, University of California, USA	Dec. 2011	Visited to the Dept. & inspire them about the

				subject Physics.
4	Prof. F.C. Raghuwanshi Dean of Science	Vidyaabharati, College, Amravati	2012- 2013	Interaction with students

**25. Seminars / Conferences / Workshops organized & the source of funding**

- National: Conference on “Developing Frontiers of Physics, Astronomy & Space Science” (DFPASS) on 24 & 25 Sept. 2010 Funded by UGC.
- International : Nil

**26. Student profile programme / course wise:**

Name of the course /programme(refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			M	F	
Year : 2013 - 2014					
B.Sc. I (Sem I)	224	161	71	90	71.78
B.Sc. I (Sem II)		161	71	90	80.12
B.Sc. II (Sem III)	128	128	48	80	65.63
B.Sc. II (Sem IV)		128	48	80	73.44
B.Sc. III (Sem V)	79	78	30	48	62.82
B.Sc. III (Sem VI)		79	31	48	89.87

M = Male F = Female

**27. Diversity of Students**

Name of the course	% of students from the same state	% of students from other state	% of students from abroad
B.Sc. I	100	Nil	Nil
B.Sc. II	100	Nil	Nil
B.Sc. III	100	Nil	Nil

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc. ?**

Two students are selected in defence service as a post of Lieutenant in Chennai.

**29. Student progression**

Student progression	Against % enrolled
UG TO PG	30-50
PG to M.Phil.	N.A.
PG to Ph.D.	N.A.
Ph.D. to Post-Doctoral	N.A.
Employed	

• Campus Selection	3 %
• Other than campus recruitment	15 %
Entrepreneurship / Self- employment	2 %

### 30. Details of Infrastructural facilities

- **Library** : Department of physics having departmental library with 100 books, & more than 300 e-books.
- **Internet facilities for Staff & Students** : Yes, Department having Internet Facility for Staff & Students.
- **Class rooms with ICT facility** : ICT facility is available in Laboratory.
- **Laboratories**: Department having 4 well equipped Laboratories.

Sr. No.	Laboratories	Dimensions	Total Area
1	Lab 1	13.59 m x 8.26 m	112.25 Sq. meter
2	Lab 2	17.01 m x 7.05 m	129.92 Sq. meter
3	Lab 3	10.33 m x 6.36 m	65.69 Sq. Meter
4	Lab 4(Dark room)	3.12 m x 8.22m	25.64q. meter

### 31. Number of students receiving financial assistance from college.

#### University, government or other agencies:

More than 70% students receive financial assistance from govt./college/university/other agencies in the form of Scholarships, freship, prizes etc.

### 32. Details on students enrichment programmes (special lectures / workshops / seminar) with external experts.

- Department of physics organized a national conference / workshop on “Developing Frontiers of Physics, Astronomy & Space Science” (DFPASS),
- students actively take parts in delivering a seminar, group discussion, study tours,
- Sky Observation Club with external expert Dr. Nitin Oke (NASA Educator)

### 33. Teaching methods adopted to improve student learning

- Interactive method, ICT based lectures, Power Point Presentations, Simulations, Chart & Models, Demonstration.

### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Science exhibition are arrange on National Science day in physics lab jointly with Lokmat daily Newspaper. This exhibition is open for the students of schools & colleges as well as for public of Akola city.
- Mr. P. P. Gedam newly appointed as a care taker of NCC Cadets.
- Member of Sky Observation Club.
- Member of “MUNIJAN” committee.
- Member of Teacher Guardian Committee.

- Department of physics actively participated in Blood Donation camp.

### **35. SWOC analysis of the department and Future plans**

#### **STRENGTH :**

- Spacious Well equipped Laboratories with dark room.
- Good strength of students in each class.
- Most of the students offering physics are members of Sky Observation Club of the college

#### **WEAKNESS :**

- Inadequate recruitment of permanent teaching staff.

#### **OPPORTUNITIES :**

- To arrange visit of students to research institutes like TIFR, NPL etc.
- To apply for Major & Minor Research projects in physics
- To inspire students to opt for higher studies in subject physics after graduation.

#### **CHALLENGES :**

- There is a craze among the students to join professional colleges after standard XII th hence we face the challenge to motivate talented students to join B.Sc. class i.e. (basic science course)

#### **FUTURE PLANS:**

- To organize a conference on materials Science
- To start PG course in the Department
- To establish memorandum of understanding with the industries like Sterlite in Aurangabad.
- To establish Scientific & Technologically Research Orientation in Physics (STROPHY) in the department.

## Evaluative Report of the Department of Physical Education

1. Name of the department : Department of Physical Education
2. Year of Establishment : 1<sup>st</sup> April 1970
3. Names of Programmes / Courses offered : B.Sc., M.Sc.
4. Names of Interdisciplinary courses and the Departments / units involved : Nil.
5. Annual/ semester/choice based : Semester Pattern (B.Sc. & M.Sc.)  
credit system (programme wise)
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other Univ., industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts

Sr. No.	Post	Sanctioned	Filled
01	Professors	--	--
02	Associate Professors	--	--
03	Asst. Professors/DPE	01	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience
<b>Mr. Rajesh D. Chandrawanshi</b>	B.Com, B.A.(His) B.Ed., B.P.Ed., M.P.Ed., NET.(Phy.Ed) <b>Colour Coat Holder</b> in Judo & Wrestling, <b>Karate –</b> Brown Belt	Director of Physical Education	Wrestling, Judo, Karate, Boxing, Self Defense & Ancient Weapons	<b>02 Years</b> Lect. in Physical Ed. College  <b>04 Years</b> Physical Ed. Teacher in Central School  <b>11 Years</b> Director Of Physical Ed.

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : N.A.
13. Student -Teacher Ratio ( programme wise) : 1256: 01
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Nil
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification	University	Year of Completion
Mr. Rajesh D. Chandrawanshi	M.P.Ed.	SGB Amravati University	March-1995
	NET	UGC, New Delhi	June 1998
	Ph.D.	SGB Amravati University	On going

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received  
Minor Research Project

Name of Faculty	Project Title	Funding Agency	For Period	Grants Sanction/ Received
Mr. Rajesh D. Chandrawanshi	Vidharbhatil Kustigirana Prapt Haonarya Sadhan Suvidha Va Kustigirani Prapt Kalelya Pravinyachya Sahsambdhache Adhyayan.	UGC	2013-2015	1,20,000/- Sanction 1,00,000/- Received

**Development of Sports Equipments (UGC XI Plan)**

Session	Item	Budget Intimate	UGC Allocation	Grants Received
2011-2012	Sports Equipments	5,00,000/-	5,00,000/-	5,00,000/-

17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received :** The details are shown above in 16

18. **Research Centre /facility recognized** : Nil  
by the University

**19. Publications / Presentation:**

Level	Conference Proceeding	Paprr Presentation
<b>International</b>	01	01
<b>National</b>	04	02
<b>State</b>	00	02

**20. Areas of consultancy and income generated  
Consultancy & Extension Work Activities (Five Years)**

Area	Income Generated	Purpose
Department develops Coaching facility of Judo, Wrestling and Boxing with Physical Fitness Training in College Campus for the students of various Schools, Colleges and for the nearby Club Players.	<b>Charitable Basis</b>	This work is fully devoted for poor and needy students from different Schools or Colleges. Extension work is fully engaged during spare time of students in positive activity so that they get sports achievement certificates in various events. These sports achievement certificates help them to get jobs in different fields as per government norms.

**21 Faculty as members in a) National committees) International Committees c) Editorial Boards....**

Name of Faculty	Member
Mr. Rajesh D. Chandrawanshi	Life Member of Physical Teachers Association Univ. Level
	Life Member of N.U.T.A
	Joint Secretary of Akola District Judo Association, Akola
	Life Member of Masters Athletics Association, Akola
	Life Member of Indian Federation of Computer Science in Sports
	Member of Akola District Kustigir Parishad, Akola

Name of Faculty	Session	Member in Committee related to University & Others Activity
Mr. Rajesh D. Chandrawanshi	2010-2011	University's Wrestling (M) Selection Committee Member
		University's Wrestling (W) Selection Committee Member
		Inter Collegiate T.T. Women's B & Men's A Zone Tournament <b>Person Incharge</b>
		Committee Member of College Affiliation Committee of S.G.B.A.U. on 03/03/11 at Amravati
		Committee Member of Placement committee of Mr. Kailash Karale, D.P.E., Shri Narsing Arts College, Akot
		Coach of S.G.B.A. University's Women Wrestling from 27 <sup>th</sup> to 30 <sup>th</sup> October 2010 for AIU Jaipur.
		Officer Incharge of S.G.B.A. University's Summer 2011 examination
	2011-2012	Inter Collegiate T.T. Men's Tournament <b>Person Incharge</b>
		University's Wrestling(M) Selection Committee Member
		University's Wrestling(W) Selection Committee Member
		<b>Judo Coach</b> - Amravati Division <b>Police Judo Team</b>
	2012-2013	Inter Collegiate T.T. Men's Tournament <b>Person Incharge</b>
		Scrutiny Committee Member for All India Inter University Wrestling (M&W) Championship 2012 on 12 <sup>th</sup> to 16 <sup>th</sup> Dec.12
		University's Wrestling (M) Selection Committee Member
		University's Wrestling (W) Selection Committee Member
	2013-2014	<b>Organizing Secretary</b> of one day conference of Physical Education Teacher at Akola, 23 <sup>th</sup> Feb 2014
		University's Wrestling(M) Selection Committee Member
		University's Wrestling(W) Selection Committee Member
	2014-2015	University's Wrestling(M) Selection Committee Member
		University's Wrestling(W) Selection Committee Member

**22. Student projects** : N.A.

- a) Percentage of students who have done in-house projects including inter departmental /programme
- b) Percentage of students placed for projects in organizations outside the institution  
i.e.in Research laboratories/Industry/ other agencies

**23. Awards / Recognitions received by faculty and students (Five Years)**



Sr. No.	Session	Event
1	2011-12	Women Team of Table Tennis was <b>University Champion</b> in Sant Gadge Baba Amravati University, Amravati.
2	2012-13	Women Team of Table Tennis was <b>University Champion</b> in Sant Gadge Baba Amravati University, Amravati.
3	2014-15	Women Team of Table Tennis was championship <b>Runner Team</b> in Sant Gadge Baba Amravati University, Amravati.
4	2014-15	Appreciation Award- IMA Walkathon , Akola

### Colour Coats Awarded by University in Sports & Youth Festival

Sr.	Session	Name of Student	Event	Level
1	2010-11	Ms. Dhananshri Sone	Wrestling	National(AIU)
2		Ms. Dhananshri Sone	Judo	National(AIU)
3		Ms. Ankita Pimple Indradhanushya Medal	Fine Art (Y.F.)	National (West Zone AIU)
4	2011-12	Ms. Kalyani Moharil	Table Tennis	West Zone (AIU)
5		Ms. Durga Dandale	Wrestling	National(AIU)
6	2012-13	Ms. Dhananshri Sone	Wrestling	National(AIU)
7		Ms. Dhananshri Sone	Boxing	National(AIU)
8		Ms. Prachi Tathurkar	Badminton	West Zone (AIU)
9		Ms. Bhavana Sadar	Boxing	National(AIU)
10		Ms. Urja Shah	Boxing	National(AIU)
11		Ms. Kalyani Mohril	Table Tennis	West Zone (AIU)
12		Ms. Mahima Thakur	Table Tennis	West Zone (AIU)
13		Ms. Deepika Sonar	Hockey	West Zone (AIU)
14	2013-14	Ms. Dhananshri Sone	Judo	National(AIU)
15		Ms. Dhananshri Sone	Judo (Open)	National(AIU)
16		Ms. Prachi Tathurkar <b>University Team Captain</b>	Badminton	National (AIU) <b>Winner of Central Zone</b>
17		Ms. Kalyani Mohril	Table Tennis	National (AIU) <b>Winner of Central Zone</b>
18		Ms. Devyani Vyahare	Table Tennis	National (AIU) <b>Winner of Central Zone</b>
19		Ms. Deepika Sonar	Hockey	Central Zone (AIU)
20		Ms. Rashmi Mandurkar	Softball	National(AIU)
21	2014-15	Ms. Devyani Vyawahare Univ.team not participated	Table Tennis	Central Zone Tournament.
22		Ms. Shubhangi Laghe	Wrestling	National(AIU)
23		Ms. Shubhangi Laghe	Judo	National(AIU)
24		Ms. Kiran Bajar	Boxing	National(AIU)

25		Ms. Harsha Agrawal	Boxing	National(AIU)J
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43 Players were awarded by Gold, Silver or Bronze medal in University Level, State Level or Open Tournament.

Sr. No.	Name of Person	Designation and Institution
1	Dr. Avinash Asname	Director, Board of Physical Education & Recreation, SGB Amravati University.
2	Dr. P.B. Raghuwanshi	Senate Member, SGB Amravati University.
3	Dr. Sanjay Deshmukh	Senate Member, SGB Amravati University.
4	Prof. D.S. Mahla	Chairman of Wrestling selection committee SGB Amravati University.
5	Dr. Jayant Chatur (Ph.D. Guide)	Principal, Wadhawani Kala Mahavidyalya, Yavatmal.

**25. Seminars/ Conferences/Workshops organized & the source of funding**

a) National                      b) International                      :              Nil

**26. Student profile programme /course wise :**

**Student Participation at University level Sports and Games (Last Five Years)**

Event/Session	2010-11	2011-12	2012-13	2013-14	2014-15	Total
<b>Athletics</b>	08	11	11	06	11	<b>47</b>
<b>Badminton</b>	08	03	07	09	09	<b>36</b>
<b>Table Tennis</b>	10	09	09	08	07	<b>43</b>
<b>Chess</b>	06	00	05	05	06	<b>22</b>
<b>Judo</b>	02	03	01	01	03	<b>10</b>
<b>Wrestling</b>	04	03	05	04	05	<b>21</b>
<b>Boxing</b>	04	05	10	06	06	<b>31</b>
<b>Handball</b>	00	00	02	00	01	<b>3</b>
<b>Basketball</b>	00	00	08	08	01	<b>17</b>
<b>Softball</b>	00	00	00	01	01	<b>2</b>
<b>Volleyball</b>	10	00	00	00	20	<b>30</b>
<b>Hockey</b>	00	00	01	01	00	<b>2</b>
<b>B.P./W.L./P.L.</b>	01	00	04	01	00	<b>6</b>
<b>Cross Country</b>	02	00	00	00	00	<b>2</b>
<b>Football</b>	00	00	14	14	00	<b>28</b>
<b>Yoga</b>	00	00	00	01	01	<b>2</b>
<b>Kabaddi</b>	00	00	00	00	01	<b>1</b>

<b>Archery</b>	00	00	00	00	01	<b>1</b>
<b>Lawn Tennis</b>	00	00	00	00	01	<b>1</b>
<b>Taekwondo</b>	00	00	00	00	03	<b>3</b>
<b>Youth Festival (Cultural Event)</b>	05	19	06	21	34	<b>85</b>
<b>Year Wise Total</b>	<b>60</b>	<b>53</b>	<b>83</b>	<b>86</b>	<b>111</b>	<b>393</b>

**Yearly Programme**

<b>Sr. No</b>	<b>Physical Education / Sports Programme</b>	<b>Level</b>	<b>Planning</b>	<b>Execution</b>
1	Table Tennis (Men)	College Level	* Meeting with Principal	Implementation of planning.  To provide facility of ground and equipments.  Morning & Evening
2	Table Tennis (Women)		* Preparation of Budget	
3	Chess ( Men & Women )		* Purchase of equipments	
4	Football (Men)		* Notices	
5	Badminton (Women)		* Gathering of interested Students & make a list as per their sports event	
6	Badminton (Men)		* Check their previous Sports performance.	
7	Basketball (Men)		* Various sports event & Selection trials	
8	Boxing(Men)		* Team or Player selected as per Performance basis.	
9	Boxing(Women)			
10	Athletics( Men)			
11	Athletics(Women)			
12	Wrestling(Men)			
13	Wrestling(Women)			
14	Judo (Women)			
15	Taekwondo			
16	Youth Festival			
17	Physical efficiency training	College Level	Physical efficiency training for the students who are not related with NSS/NCC/Sport	Morning Session
18	Conduct Medical Examination	College Level	*For All Students (U.G) *Appointed Doctor	December 2014

19	Selection of various teams for Inter collegiate competition	College Level	Organization and planning as per inter collegiate competition Programme provided by University.	Selection Skill Teaching, Fitness Training
20	Sent the incentive marks of participated students. (In Two Semester)	College Level	Collect information as per departmental record.	As per event Participation on October 20

#### Medical Checkup

Session	Year wise Beneficiaries		
	Female	Male	Total
2010-2011	347	98	445
2011-2012	178	65	243
2012-2013	181	63	244
2013-2014	192	89	281
2014-2015	163	111	274
<b>Total</b>	<b>1061</b>	<b>426</b>	<b>1487</b>

#### Statement for Physical Efficiency Test (Five Years)

Session	Men	Women	Year Wise Total
<b>2010-2011</b>	28	111	<b>139</b>
<b>2011-2012</b>	62	137	<b>199</b>
<b>2012-2013</b>	34	153	<b>187</b>
<b>2013-2014</b>	61	244	<b>305</b>
<b>2014-2015</b>	64	388	<b>452</b>
<b>Total</b>	<b>249</b>	<b>1033</b>	<b>1282</b>

#### Sports Adventure Activity

Students, Players, Extension Work's Players, Staff & Family Members

Session	Year Wise Total
<b>2010-2011</b>	32
<b>2011-2012</b>	46
<b>2013-2014</b>	76
<b>2014-2015</b>	82
<b>Total</b>	<b>236</b>

#### 27. Details of Infrastructural facilities

Sr. No.	Name of the Sports Facility
<b>1</b>	Boxing Ring Facility and equipment
<b>2</b>	Wrestling & Judo Hall Facility and equipment

3	Multi Station Gym & Fitness Equipments Facility and equipment
4	Table – Tennis Hall Facility and equipment
5	Badminton Hall Facility and equipment
6	Department of Physical Education- Office
7	Store Room

**28. Participation in Institutional Social Responsibility (ISR) and Extension activities**

**Department actively participated in different Instructional Activities:**

- Local Managing Committee
- Coaching of Judo, Wrestling & Boxing with Physical Fitness Training under extension work of department.
- General Evaluation of College Committee - Chairman
- Career Guidance Committee - Member
- Sports Committee - Chairman
- Student Represented Council -Member
- Internal Quality Assurance Cell - Member
- Member / Incharge of UGC Merged Grant Scheme – Coaching Classes Entry in Services of SC/ST/OBC & Minorities
- Officer Incharge of S.G.B.A. University’s Summer 2011 examination
- College Magazine Committee – Chairman / Member
- Consultancy Extension Work Committee -Member
- Code of Conduct Grievance Committee –Member
- Incharge HOD of Language Department.

**29. SWOC analysis of the department and Future plans**

- **Strength** - Hard Work to complete Social Responsibility
- **Weakness** - Outdoor Sports activity depends on outside ground.
- **Opportunity** - Job opportunity through sports certificates.
- **Challenge** - To make player for higher achievement in sports.
- **Future Plans** -
  - A. Aerobics Centre
  - B. Yoga Centre
  - C. Major Research Project
  - D. Development of Adventure Activity

(National Level)

E. To organize National Level Conference.

## Evaluative Report of the Departments of Zoology

1. Name of the department : Zoology
2. Year of Establishment : 1970
3. Names of Programmes/Courses offered (UG, PG, M.Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.) : UG  
Zoology-Chemistry-Botany,  
Zoology -Chemistry-Microbiology  
Zoology-Chemistry-Bioinformatics
4. Names of Interdisciplinary courses and the departments/units involved : Nil
5. Annual/semester/choice based credits system (programme wise)  
: Semester system  
Semester I & II (B.Sc-I)  
Semester III & IV (B.Sc-II)  
Semester V & VI (B.Sc-III)
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of Teaching posts :

Teaching Post	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	6	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name of faculty	Qualification	Designation	Specialization	No. of years of experience	No of PhD students guided for the last 4 years.
Dr S.M.	M.Sc, NET,	Assistant	Entomology	10 years	Nil

Nagrале	PhD	Professor and Head			
Dr A. H. Amaley	M.Sc, M.Phil PhD	Assistant Professor	Animal Physiology	8 years	Nil
DrS.R.K ohchale	M.Sc, M.Phil PhD	Assistant Professor	Mammalian Reproductive Physiology	6 years	Nil
Dr. R.L. Rahatga onkar	M.Sc, M.Phil PhD	Assistant Professor	Mammalian Reproductive Physiology	1year	Nil
<b>CHB staff: 10</b>					

11. List of senior visiting faculty: Nil

12.

Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty: Year 2014-15

	Lecturer delivered	Practical handled
Temporary faculty (CHB)	00	48.7 %

13. Student-Teacher Ratio (program wise) : Year 2014 - 15

Programme	Student : Teacher ratio
UG	25 : 1

14.

Number of academic support staff (technical) and administrative staff; sanctioned and filled

Non-teaching staff	Sanctioned	Filled
Academic support staff (Technical)	4	3
Administrative staff	1	0

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.:

Qualification	Ph.D.	M.Phil+Ph.D.	NET+PhD	PG	Total
No. of permanent faculty	0	3	1	0	4
No. of temporary faculty	0	0	0	10	10

16.



**Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: 1, Minor Research Project, UGC-New Delhi, Grants: Rs 1,35,000/-**

**17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

Faculty	Project	Project Title	Funding agency	Grant sanctioned/received
Dr S.M.Nagrале	Minor research project	Assessment of Insecticidal and larvicidal properties of <i>Parthenium hysterforus</i> (congress grass) on mosquitoes of Akola city	UGC New Delhi <b>2010-12</b>	30,000/-
Dr A.H.Amaley	Minor research project	Study of web architecture, silk, silk glands and spinnerets of giant wood spider, <i>Nephilapilipes</i>	UGC New Delhi <b>2013-15</b>	1,35,000/-

**18. Research Centre/facility recognized by the University: Nil**

**19. Publications:**

a) Publication per faculty

Faculty	No. Paper Published in		No. of paper presented in conference/ seminar/ workshop	Number of publications listed in International Database	Citation Index	Impact factor	Chapter in Books
	International / National journals	proceedings					
Dr. S.M.Nagrале	3	2	15	-	-	0.215	-
Dr. A.H.Amaley	6	8	13	-	-	-	1
Dr. S.R.Kohchal	8	1	7	-	-	2.191	

e							
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**Books details: A Test book of Zoology for fourth semester of B.Sc.II, Nabha Prakashan Amravati. ISBN: (Under process)**

**20. Areas of consultancy and income generated: Income- Nil**

- Microphotography
- Entomology study
- Physiology & Toxicology study

**All are voluntary**

**21. Faculty as members in-**

a) National committees, b) International Committees, c) Editorial Boards....

Name of faculty	Membership
<b>Dr S M Nagrale</b>	1. The Biosphere, National Educational Trust, Dist-Sivan, Bihar
<b>Dr. A H Amaley</b>	1. Indian Science Congress Association, Kolkata 2. Indian society of Arachnology 3. Wild life and Environment Conservation Society, Amravati
<b>Dr. R.L. Rahatgaonkar</b>	1. Nature conservation society, Amravati 2. Sanctuary magazine, Mumbai

**22. Student projects :**

a) Percentage of students who have done in-house projects including interdepartmental/programme : **100%**

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : **Nil**

**23. Awards/Recognitions received by faculty and students:**

**a) Faculty**

Faculty	Awards/Recognitions received	Year
<b>Dr S.M.Nagrale :</b>		
•	PhD from S.G.B. Amravati University, Amravati	2012-13
<b>Dr. A.H.Amaley :</b>		
•	<b>Best oral paper presentation</b> in National conference on 'Arachnology', Walchand College, Solapur	2011-12
•	PhD from S.G.B. Amravati University, Amravati	2014-15
•	<b>1<sup>st</sup> prize for best research paper presentation</b> in national symposium cum workshop on 'Diversity of Spider with special	2014-15

reference to taxonomy and molecular systematics ' ShankarlalKhandelwal College, Akola	
• Honoured with prize for excellent work in research and development by V.S.Kale memorial Trust, Amravati	2014-15
<b>Dr. S.R.Kohchale :</b>	
• PhD from S.G.B. Amravati University,Amravati	2013-14

### b) Students

Sr. No	Name of Students	Events	Awards/ Achevements
1	Mr.Tushar S. Ghope	The merit list of SantGadge Baba Amravati University, Amravati : Summer-2013	4 <sup>th</sup> Merit
2		Seminar competition –by ISCA at SGB Amravati University, Amravati (2012-13)	1 <sup>st</sup> position
3	Ku. SoniyaNagre	State level research festival-Avishkar(2014-15)	Colour Coat
4	Miss ManjuPariyani	selected for 'INSPIRE Scholarship' Govt. of India(2011-12)	Scholarship 4,00,000/-
5		Achieved prize in Poster exhibition National/ State level conference, seminar 2012-13	2 <sup>nd</sup> prize
6		State level Seminar competition 2013-14	1 <sup>st</sup> position

### 24.Listofeminentacademiciansandscientists/visitorsstothe department

- **Prof Dr G.N.Vankhede**, Professor and Ex-Head, P.G.Department of Zoology, SantGadgeBaba Amravati University, Amravati, Ex-Chairman Board of Studies, Zoology and Founder President, Indian Society of Arachnology
- **Dr. I.A.Raja**, Associate Professor and Head Department of Zoology, Shivaji College of Arts, Commerce and Science, Akola, Ex-Chairman Board of Studies, Zoology
- **Mr Ajay Giri**, Educational Officer, Agumbe Rainforest Research Station, Shimoga, Karnataka
- **DrShrikantAhirkar**, Associated Professor , Departement of Entomology, DrPanjabraoDeshmukhKrishiVidhyapith, Akola
- **DrMilindShirbhate**, Assistant Professor, Department of Zoology, ShankarlalKhandelwal College, Akola
- **Mr. Devendra S. Khaire**, Government Vidharbha Institute of Science and Humanities, Amravati.
- **MrMadanJungare**, Research Scholar and DAAD Fellow, University of Konstanz, Germany.

- **Mr Sarang Talwelkar, Research Scholar, Institute of Molecular Medicine, Finland and Research Assistant, Department of Dermatology, University of Birmingham, Germany.**
- **Mr Uday Vaze, Presidents, Shruti Vaibhav, Akola**

**25. Seminars/Conferences/Workshops organized & the source of funding**

- a) National b) International: One proposal of National Seminar and One proposal of National Conference  
Submitted to WRO-UGC, Pune
- Organized seminar on “Snake awareness” on 22<sup>nd</sup> August 2010
  - Organized Science exhibition and competition ‘**Science Pundit**’ in collaboration with Lokmat Yuva Next and Bal Vikas Manch on every 28<sup>th</sup> Feb, ‘Science Day’ (Every year).
  - Organized Essay competition and awareness campaign on ‘**World AIDS Awareness Week**’ in 1<sup>st</sup> week of December (Every year).
  - Organized Seminar and guest lecture on observing ‘**Wild-Life Conservation Week**’ in 1<sup>st</sup> week of October (Every year).

**26. Student profile programme/coursewise: 2013-14**

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I Sem-I	223	134	22	112	47.14%
B.Sc. I Sem- II		134	22	112	73.88 %
B.Sc. II Sem-III	76	76	19	57	40.26%
B.Sc. II Sem-IV		76	19	57	59.21 %
B.Sc. III Sem-V	63	63	15	48	85.48%
B.Sc. III Sem -VI		63	15	48	98.41 %

\*M=Male \*F=Female

**27. Diversity of Students: 2014-15**

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
UG	100 %	00	00

**28.**

**How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: Nil**

### 29. Student progression

Student progression	Against % enrolled
UG to PG	30-50%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
<b>Employed</b>	
• Campus selection	00
• Other than campus recruitment	10-20%
Entrepreneurship/Self-employment	5-10%

### 30. Detail of Infrastructural facilities

Infrastructure facilities	Status	Numbers
Library	Books in Central Library	1725
	Books in Department library	190
	Journals	3
	Science magazines	2
Internet facilities for Staff & Students	Desktops	2
Class rooms with ICT facility	LCD Projector	1
	Printer	3
	Printer with scanner and copier	1
	Audio system	1
	Visual CDs	10
	Documentary DVDs	6
	Power point Presentation	30
Laboratories	Zoology laboratory (Capacity of 60 students) Dimension : 7.05X17.01=119.92sq.m	1
	Fresh Water Fish Culture laboratory	1

	(Capacity of 40 students) Dimension: 6.30X14.38=90.59 sq.m	
	Research Laboratory	1
Other	Head and Teaching staff room	1
	Non teaching staff room	1

### 31.

#### Number of students receiving financial assistance from college, university, government or other agencies

More than 70% of students are receiving financial assistance from college, university, government or other agencies in the form of scholarships, freships, fellowships, stipend and prizes.

### 32.

#### Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Resource person	Designation/ Institution	Topic	Programs	Date
<b>Dr. G.N. Vankhede</b>	Professor and Ex-Head, P. G Department of Zoology, S.G.B. Amravati University, Amravati, Ex-Chairman, Board of Studies, Zoology, Founder President, Indian Society of Arachnology	Free Economic Service by Spiders: Research possibilities	Special lecture	26 <sup>th</sup> Feb 2013
<b>Mr Uday Vaze</b>	President, 'Shrustivaibhav', NGO, Akola	Global warming and Mother Earth	Student Seminar competition, special lecture	11 <sup>th</sup> March 2013
<b>Dr. Milind Shirbhate</b>	Asst Prof. Department of Zoology, Shankarlal Khandelwal college, Akola	Status and Conservation of Indian Tiger	<b>Wild Life Conservation week,</b> special lecture	1 <sup>st</sup> Oct 2013
<b>Mr Ajay Giri</b>	Educational Officer, Agumbe Rainforest Research Station, Shimoga, Karnataka	Human-Snake conflict mitigations program	Special lecture	31 Jan 2014
<b>Mr Madan Junghare</b>	Research Scholar and DAAD Fellow, University of Konstanz, Germany	Opportunities for education and research in Foreign	Special lecture	22 <sup>nd</sup> Feb 2014

		countries		
<b>MrDevendraKhaire</b>	Lecturer, GVISH, Amravati	DNA fingerprinting and PCR	Speciallecture	7 <sup>th</sup> March 2014
<b>Institutional visits /study tour</b>				
Insect Museum, Department of Entomology, DrPanjabraodeshmukhKrishiVidhyapith, Akola				<b>7/10/2013</b>
Study tour to Bhandardara and Aurangabad				<b>12- 14/9/2012</b>
<b>All above programs are organized under ZEBRA (Zoology Education By Research Activity) cell of Department</b>				

### **33. Teaching methods adopted to improve student learning**

- Use of ICT, power point presentation for effective teaching and better understanding of difficult topics.
- Charts, visual aids, models are effectively used in teaching-learning process.
- Documentary, educational movies and student seminar are arranged for students.
- Used videos and virtual practical software for dissection and practical demonstration.
- Notes, question bank, university question papers, model answer papers and practical booklet are provided to the students.
- Seminars, special guest lecture of eminent academician are organized.
- Question solving session, remedial classes are arranged for slow learner students

### **34.**

#### **Participation in Institutional Social Responsibility (ISR) and Extension activities**

1. Faculty members have worked as NSS programme officers and have extended their services in NSS, Blood donation camp and various extracurricular activities.
2. Faculty members have worked as coordinators and members in various committees of college.
3. Faculty members have worked as examiners/judges in science exhibitions and paper/poster presentations/competition organized by other institutions.
4. Faculty members guide and help the students in preparation of seminar, quiz, debate, elocution competitions, oral /poster presentation, science exhibitions, research festival, the assignments and project assignments of the students. They also guide the students for promoting activities under ZEBRA cell.

5. Faculty Dr A.H.Amaleyhas worked as a resource person in National Symposium cum Workshop 'Diversity of Spider with special reference to taxonomy and molecular systematics' ShankarlalKhandelwalCollegeAkola and District VidnyanManch Students Enrichment Camp at Shivaji College of Arts, Commerce and Science Akola.

6. DrS.R.Kohchaleis working as a NSS programme officer from 2011-12 to till date.

7. Faculty members have worked as senior supervisor for Maharashtra Talent Search (MTS) examinations.

### **35. SWOC analysis of the department and future plans**

- **Strength**

1. All faculties are Ph.D holders, result oriented, dedicated and one having research caliber.
2. Academic support (technical) staff is cooperative.
3. Laboratory is well equipped with research caliber instrument facility and modern tools of teaching.
4. Faculties are research oriented, actively participate in research related programs and publish research paper in journals.

- **Weakness**

1. Insufficient academic and technical supportive staff due to Government changing policies.
2. No research recognized laboratory
3. Unable to start PG in the subject due to S.G.B. Amravati University's new rules and norms

- **Opportunity**

1. To recognize the laboratory for research and to start PG course.
2. To establish collaboration and develop fruitful consultancy services.
3. To make aware the students about INSPIRE scholarship for basic science subjects
4. To promote students for research through ZEBRA cell activity.

- **Challenges**

1. Molding of students' approach towards basic science with awareness of modern techniques and interdisciplinary aspects.
2. To start the interdisciplinary research having social relevance
3. To extend research lab to land

- **Future plan**

1. To submit the proposals to funding agencies like MOEF, UGC, DST, DBT, CSIR etc., for major research project and Insect Biodiversity Network Project



2. To start career oriented certificate/diploma courses for students.
3. To start consultancy services for research students, farmers, villagers and to establish animal museum under ZEBRA cell.

## Evaluative Report of the Department Library

**Name of the Department : - Central Library**

College Library is established in 1970. Earlier it was housed in old building and then shifted in a new building in 2015. Total carpet area of library is 268 Sq. Mts. Stack room, Separate Girl's Reading Room, Separate Boy's Reading Room, Separate Staff Reading Room, Reference Room, circulation department, Space for OPAC, News Paper reading section, Staff reading Room, Librarian's Room, Reprographic section. The Library rendered various user friendly services like Reference Service, News Paper Clipping Service, Reprographic Services, Inter Library loan, Book Bank, etc. The Library started best practices to provide effective library services like Question Paper of Previous University Examinations, For selection of Books Every year Library organizes Book Exhibition, New Arrivals are displayed, Best library User Award is given to Student from every Year, etc. Library provides E-Journals and E-Books through NLIST Consortia.

### 1. Library at Glance

Total No of Books	: - 32177
Total No of Journals & Periodicals	: - 14
Magazines	: - 34
Bound Volumes	: - 426
Total No of Maps	: - 15
CD's Rom	: - 131
Project Report	: - 34
Thesis & Dissertation	: - 25
News papers	: - 16
Member INFLIBNET NLIST Project	

### 2. Working hours:

On working days : - From 7.30 am to 6.30 pm

### 3. Sections of Library

- Acquisition
- Circulation
- Cataloguing
- Serial Control
- OPAC
- Reading Room
- Reprography
- Digital Library

### Computerized and Bar-coded Library with SOUL Software

**4.Faculties in the Department** : -01

A. Name of the Faculty Member : - Mangesh R.Ubale

B.Designation : - Librarian

C.Qualification : - B.com. M. Lib. &I sc,M.Phil

D.Teaching experience : - 06 yrs

E.Cell No. / : - 91-9766546766

Ph. No., 91-724-2435480, 2422480

Email address etc. [mangesh.ubale@gmail.com](mailto:mangesh.ubale@gmail.com)

F.Membership of professional

- NUTA
- LIS Study circle
- Bodies, editorship of journals

### 5. Details of Administrative / Technical Staff

Sr. No.	Name	Post
1	Shri. J.W.Wagare	Assistance Librarian M.A(His),B.L.I.Sci
2	Shri.S.S.Rakhonde	Library Clerk
3	Shri.S.G.Solanke	Library Clerk
5	Shri.H.P.Pimpalkhare	Library Attd.
6	Shri.W.L.Alimchandani	Library Attd.
7	Shri.A.B.Tayade	Library Attd.
8	Shri.V.S.Shinde	Library Attd.

**6. Learning Resources of Department:** -07Computers/Education  
CDs. /DVDs07 nodes for computer for Internet & use of NLIST through NRC

## 7. Faculty Members Participated in

### National and International Conferences (2010-2015) :-

Sr no	Name of Conference	Place and Name of the Sponsoring Agency	Date /Place/Level	Paper Presented / Attended
1	National Level Conference	ShriRadhakisanLaxminarayanToshniwal College of Science,Akola	24-25 Sept-2010	Attended
3	International Conference	Ramakrishna Mahavidyalaya,Darapur	25-26 Nov-2011	Paper Presented
4	Journal Publication	Aadhar Publication	02 Oct-2012	Paper Presented
5	International Conference	ShriShivaji College of Arts,Commerce&Science,Akola	29-30 Oct-2012	Attended
6	National Level Conference	ShankarlalKhandelwalArts,Science&Commerce College,Akola	27-28 July-2012	Paper Presented
7	International Conference	Ramakrishna Mahavidyalaya,Darapur	11-12 Jan-2013	Paper Presented
8	National Level Conference	ShriRadhakisanLaxminarayanToshniwal College of Science,Akola	10 <sup>th</sup> Oct-2013	Attended
9	International Conference	TakshashilaMahavidyalaya,Amravati&Ramakrishna Mahavidyalaya,Darapur	10-11 Jan-2015	Paper Presented

8. Best Library User award given to the students from Science Faculty  
The award is sponsored by Librarian/College service is started from 2010 List of Students Awarded Best Library User Award

Sr.No	Year	Student Name
1	2010-11	Mr.Mohd.Asif
2	2011-12	Ms.SonaliManjare
3	2012-13	Mr. Vishal Ingale
4.	2013-14	Ms.TrishilaAdvani
5.	2014-15	Mr.GaneshKolhe

## 09. SWOC analysis and Future plans

### ● Strength

- ❖ Established Library with classic collection
- ❖ Automated Library services

- ❖ Internet facility for students through NRC
- ❖ Online and CD databases
- ❖ e-resources
- ❖ Institutional Repository in process
- **Weakness**
  - ❖ Space limitations.
  - ❖ No Independent cubical for research scholars
- **10. Opportunities**
  - ❖ To established well furnished library with advance technology.
- **11. Challenges**
  - ❖ Design Library Website/webpage.
  - ❖ Library on Mobile.
  - ❖ Organize National Level Book Exhibition every year.
  - ❖ Organize Information Literacy programmes.
- **12. Future plans**
  - ❖ Develop digital Library.
  - ❖ Open access to all stakeholders.
  - ❖ Proposed new library building

**13. Other any Highlights i.e. notable**

- Department Organise Wachan Group Books Friends for Developing Reading Habits
- Department Celebrate Jayanti of Dr S. R. Ranganathan Father of library science

**14. Best Practices of Libraries**

- ❖ New Arrivals are Displayed
- ❖ Ranganathan Jayanti Celebration
- ❖ Best Library User award Given to the students from Science Faculty
- ❖ Collection of University Question Papers from last 10 Years & provided it to Students on Demands
- ❖ Scholar card issue to Meritorious Student
- ❖ Digital Library Service
- ❖ Library is Computerized with SOUL Software
- ❖ Extended Hours for Users
- ❖ Suggestion Box & timely Response
- ❖ Career/employment information services.
- ❖ Organizing Competitions annually (Proposed)

# **BEST PRACTICES**

**Best practices:**

**7.3.1 Elaborate on any two best practices as per the annexed format (see page...) which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

**Best Practice No. 1**

**1. Title:**

Developing basic research skills for all disciplines of science through sky observation.

**2. Goal:**

- To develop interest in the field of astronomical science among students.
- To improve skill and knowledge of students through sharing experiences and information in lecture, demonstration and other group activities.
- To enable students to observe the sky through a telescope and gain a basic understanding of universe.
- To cultivate public awareness and appreciation of astronomy as a hobby and science.
- To motivate students for scientific study in the field of space and astronomy by performing simple projects.
- To extend sky observation for mathematics, physics, computer science and biology.

**3. Context:**

Since time immemorial, man is trying to find answer to questions like- what is universe? What is the fate of universe? Does the earth like planet exist? How old we are? How the life originates on earth?.....and many more. Current research is also struggling to understand these questions.

Astronomy is a discipline that opens our eyes and gives context to our place in the universe. We have to thank astronomy for recent technological advances like wireless internet, GPS and medical imaging etc.

For exploring the knowledge in the field of astronomy, Shri R.L.T College of Science and SGB Amravati University jointly organized National conference on “Developing Frontiers of Physics, Astronomy and Space Science” during 24<sup>th</sup> - 25<sup>th</sup> September 2010. Senior Professor Dr. Rajiv Gawai, TIFR, Mumbai, proposed keynote speech on “Re-creating the Big Bang”. Dr. Suresh Naik, Former Group Director, ISRO and Chairman of International Space Society, delivered very informative lecture on “Chandrayaan-Expeditions and global developments in space”. Dr. S. K. Pande, honorable Vice Chancellor, Pandit Ravishankar Shukla University, Raipur gave informative talk on “Galaxies”. A beautiful exhibition showing collection of astronomical events was arranged by Dr. Nitin Oke. This event inspired us to

start studies in the field of observational astronomy. The idea took its shape in October 2012.

SOC is an initiative by the college where different topics in general astronomy are and will be discussed with a view to enlighten, generate curiosity and inspire young minds of our science students to contribute the understanding of world around us.

#### 4. Practice:

The activities of sky observation club were started to create interest in astronomical observations among students and staff.

- **Formation of Sky Observation Club (SOC)** - A committee named “Sky Observation Club (SOC)” was formed in the session 2012-13 as-

Sr. No.	Name	Designation
1.	Principal Dr. V.D. Nanoty	Chairman
2.	Dr. S.M. Padhye	Coordinator
3.	Dr. Nitin K. Oke	Technical Adviser
4.	Prof. S.W. Bhaware	Secretary
5.	Prof. Archana H. Amaley	Member
6.	Prof. Sudhir R. Kohchale	Member

SOC decided and implemented various activities. Under “Educational Innovation, Basic development grants” a telescope “Sky watcher-8 inch flex Dobsonium” was purchased on 11<sup>th</sup> October 2012 costing Rs. 39,000. Two binoculars having magnifications 7 X 50 and 7 X 35 worth Rs. 9600 were also purchased.

- **Membership-** College student of any course with an interest in amateur astronomy is eligible for membership. Membership should be obtained through acceptance by coordinator and teacher members.
- **Technical Guidance-** An alumna of our college, Dr. Nitin K. Oke (M.Sc. Maths; NET; Ph.D. from Syracuse University, U.S.A) is working as a



Technical Advisor of SOC. He is a well known NASA Educator and listed Sky Observer by federation of Amateur Astronomer Association (AAA). Dr. Oke is honorable president of “Kutuhil Sanskar Kendra”, a non government organization (NGO) listed in DST, which is working for Basic Science Education from last 20 years.

- **Yearly Programme-** A tentative schedule for activities to be organized is fixed by the members of SOC in the beginning of academic year. These activities are organized and conducted successfully as under-

**August-** Interest about astronomy is developed among the students by arranging lecture series on every Tuesday. During this period, following basic information are given to students. Sky and Space, Galaxies, our Solar System and Constellations.

Various events like eclipses, formation of stars. Use of star dials, a basic tool to understand the night sky. Structure and working of human eye. Practical demonstration of conditioning of eyes for sky observation. Information about various kinds of telescopes and telescope available in college.

**September-** Beginners are motivated to collect the maximum information about stars, planets and constellations. For convenience in actual practical programme, students are divided into 7 groups namely Mercury, Venus, Earth, Mars, Jupiter, Saturn and Uranus.

Dr. Nitin Oke and renowned amateur Mr. Suhas Udapurkar gave the important tips and necessary guidance for sky observation. Training about how to fix and handle the telescope was given. Telescope was set on the terrace of wing B.

Phases of Moon are studied in this month. The activity is started from New moon to full moon and or full moon to new moon. Simultaneously, craters on the moon are observed and photographed.

**October-** Models like solar dial, magnitude and latitude measurement are designed and developed under technical guidance of Dr. Nitin Oke. Students are encouraged to share their experiences and write description of process. They are motivated to design more astronomy related models. Planets like Jupiter and Saturn are observed.

**December-** Members of SOC and NSS volunteers undertook a special astronomy awareness program for the school students and people of adopted village. Information about physical properties of Sun, Earth, and Stars is given. They also explained about various astronomical events and tried to clarify the myths about solar and lunar eclipses.

This year an informative talk along with power point presentation on “Introduction to Galaxy” was arranged by SOC at village Sonala during NSS

residential camp on 5<sup>th</sup> January 2015. Dr. Nitin Oke was the resource person who smoothly answered the questions and solved queries of audience.

**January-** Simple projects of their interest are given to students, typically involving their personal observations of the sky and collection of astronomy related data. Students are given training about counting of stars at terrace of Shri. R.L.T.College. They are encouraged to perform this activity at different locations.

**February-** A study is organized by SOC to visit a Planetarium. Students are given training to observe sky and identify prominent constellations. Detailed observations of Ursa Major and Ursa Minor are performed. Students are motivated to prepare their own power point presentations on topics like our solar system, our galaxy, the universe etc.

**March-** Students visited the local school to present their topic with power point presentation before school children. SOC tried to develop interest about astronomy among school students by organizing astronomy based context. Students made sky observation of their choice. They completed and submitted projects to their instructor.

#### **5. Evidence of Success:**

Universe awareness is an imagination, excitement and fun for youngsters. Working of SOC was started with five teachers and twenty students; now this number has rise to eleven teachers and about a hundred students.

- SOC provided many students their first look through an astronomical telescope. Sky observers realized their place in the universe and thereby engaged a personal sense of wonder and discovery. It promotes global citizenship and pride in our home planet, mother Earth.
- The beauty and grandeur of universe awakened the curiosity of students which stimulated them to exchange their experiences and ideas. Scientific awareness is increased among students by observing the effects of eclipse on living organisms. They came to know, how migratory birds or other living species identifies their path. They gain ability to identify some constellations. Students prepared some models like star dial, Ursa Major and Ursa Minor. SOC students prepared some power point presentations like our solar system, earth, moon, sun.
- School education department gave us opportunity to touch with science teachers in the local schools and propose some presentations for school students which provides informal astronomy education to school children.
- Percolation of scientific knowledge about astronomical events among villagers made them able to understand scientific reasons behind it. They became aware about myths which helped them to contribute a peaceful society.

- Astronomy Gallery is one of the major attractions of SOC. Visitors including parents, school and college students observe the colorful graphics of various astronomical events, telescope, and tools of astronomy including star dials, solar system and other models. Visit to gallery definitely increases their interest towards study of astronomy. Thus, the overall activities of SOC facilitate a wonderful network by connecting amateur astronomers, educators, people, and school and college students together for spreading scientific temper among Society.

#### **6. Problems encountered and resources required:**

- Some time female students of nearby villages found it difficult to participate in night sky watching. This problem is solved by making their temporary arrangement in college girl's hostel.
- Visibility of stars and other celestial objects is reduced due to light pollution of the city.
- Due to tall building and big trees clear horizon can not be observed from some places for studying the position of rising or setting sun.
- Presence of more dust particles in the air adds difficulty in sky observation especially during winter season by formation of smog early in the morning and night hours.
- Due to climate change, here is appearance of bad weather and cloudy atmosphere in any season which may disturb the scheduled sky watching programme.

#### **Best Practice No. 2**

##### **1. Title:**

Developing value based personalities and perfect citizens by imparting morals with education.

##### **2. Goal:**

a. To mould a student into multifaceted person with a pragmatic mind and a humane outlook capable of facing the challenges of 21<sup>st</sup> century.

b. To empower all beneficiaries & students through value based quality education.

c. To make student well disciplined, hardworking, well read member of the community and ready to give one's best to the country.

##### **3. The context:**

Empowerment of students for their all round development through education is the cherished motto of our college. For fulfilling the mission of the college, various co curricular and extracurricular activities are planned and organized to raise the moral and ethical values among the students as well as stakeholders. Practice initiated with the aim of arousing social consciousness, to sensitize learners towards human rights, gender equality, environmental issues, to imbibe the value of nationality and to contribute to national

development through value based work culture. Involvement of the staff at every level and insistence on student's participation in these activities has improved the quality of moral education. Value based programmes and activities provide a platform for collective thinking and community feeling among the students.

#### **4. Practice:**

The students are an integral part of the education system. Though our institute is pure science college, we always try to develop all those values in our students which are necessary for their all round developments. In view of this, following value education sessions are organized and conducted so that we not only developed scientific attitude among the students, but also tried to develop a good human being.

#### **\*National Consciousness**

A shared sense of national identity is developed among students through activities like –

- Every day college started with morning assembly. National anthem Jan-Gan- Man is sung with nationalistic fervor.
- National festivals like Independence Day, Republic Day are celebrated exuberantly which enhance the sense of responsibility and national spirit among students.
- Qualities of our great National Leaders are explained by observing their Birth and Death anniversaries. Various events are organized on these occasions so that the students and staff are encouraged to follow their foot prints.
- Recitation of Patriotic songs and cultural programmes on National Integration gives inspiration and raises the sense of Nationality.
- Shri R.L.T college and SGB University jointly organized one day workshop on theme 'Education for life and Life for Nation' (20/02/2013)
- In order to make people aware to cast vote and increase percentage of polling student and staff participated in voters campaign and "Human chain for voters awareness." organized by Honorable Collector , Akola (07/04/2014). NSS volunteers observed this campaign at adopted village.

#### **\*Environmental Consciousness and Biodiversity Conservation**

- Every year Department of Botany, NCC and NSS unit of college undertook tree plantation and conservation Programme in and outside the college campus.
- In NSS camp and many programmes of college, guests are honoured by offering saplings instead of bouquet.
- Saplings are gifted among the students and staff to plant and conserve them.

- Every year department of Botany and Zoology organized study tour/field visit to study plant and animal diversity and their importance in nature. Following events are organized by college to know value of biodiversity and inculcate environmental consciousness among students.
- In Session 2011-12, the theme of college Magazine Pratibimb was 'Vansampada', based on forest conservation.
- NSS students celebrates 'Rakhi Pournima' festival by tying rakhi to trees in campus and taking the oath for tree conservation.
- Guest lecture of Prof. Dr. G.N Wankhede, President, Indian Society for Arachnology (ISA) was organized on topic "Free Economic Service by Spider: Research possibilities" in which spider diversity and its key role in maintaining ecological balance was explained (26/02/2013).
- Department of Zoology organized Intercollegiate seminar competition for undergraduate students on theme "Environmental Awareness"(11/03/2013)
- On occasion of wild life conservation week a guest lecture of Dr. Milind Shirbhate, S.K college, Akola; was organized on topic 'Status and conversation of Indian Tiger' (01/10/2013).
- A guest lecture of Mr. Rajaram Mhatre , Maharashtra Jeevan Pradikaran; was organized on topic 'Environmental Protection- Need of the Day' for students and people of village Yelwan (29/12/2013).
- In women meet at Yelwan Mrs Shubhagi Vaze explained about green court yard. Village women were made aware about green patches in front of house. Pouches of vegetable seeds were distributed to them and students which were sponsored by Non- Government Organization, Vishal Himalaya Foundation, Akola (01/01/2014).
- In session 2013-14, college published Magazine Pratibimb base on theme "Scientific view of Environmental Protection".
- To reduce enormous degradation of biodiversity, Dept of Zoology stopped purchasing and dissecting animals from session 2014-15.

#### **\*Community Awareness**

As per the fundamental principles of National Service Scheme, NSS Volunteers remain in constant touch with community .Various community Awakening programmes organized and conducted successfully by college are as under-

- **AIDS awareness** – Red ribbon club of college observes AIDS awareness week (1- 7 Dec.). Lectures of eminent counselors are organized for students to make them aware about the causes and effects of HIV/AIDS and to explain the responsibilities of youth regarding AIDS awareness campaign. This year AIDS awareness camp was organized with the help of District AIDS control Unit (05/02/2014).

- **Sickle Cell Awareness** -NSS programme officer Dr. Sudhir Konchale has performed his research on ‘Genetic Screening and Evaluation of Sickle Cell Anemic patients from Gadchiroli (Maharashtra)’. From last four years, he is voluntarily performing a noble task of counseling Sickle cell patients and their family members. A guidance lecture of Dr. Dilip Sarate, Associate Professor Govt. Medical College, Akola was organized on topic “Sickle cell- A community Problem” for the students and people of village Yelwan (30/12/2013). On the same day Govt. Hospital team performed Sickle Cell checking of about 80 people.
- **Social Awareness through walkathon**- Every year, students and staff members of our college regularly participated in ‘IMA Walkathon’ organized by Indian Medical Association, Akola to bring public awareness and spread message to community about various health related and social issues. This year, the main theme of programme was ‘Organ Donation’ and two subthemes were about ‘Clean India Mission’ and Hon. Prime Minister’s ‘Jan-Dhan Scheme’.
- **Snake Awareness**- Knowledge about ‘Introduction to snake and first aids on snake bite’ was given to students and parents by organizing lecture of snake friend, Mr. Kiran Bawaskar (22/08/2010 and 16/10/2011). Well known snake friend of Akola Mr. Bal Kalne explained about ‘Benefits of snakes to farmers, identification of venomous and non-venomous snake’ etc. at village Yelvan (December, 2012). Department of Zoology organized a guest lecture of Mr. Ajay Giri, Agumbe Rainforest Research Station, Karnataka, on ‘Human- Snake Conflict Mitigation and Snakebite Management’ (31/07/2014). A guidance lecture of Dr. I. A. Raja, HOD Zoology, Shri Shivaji College, Akola, was organized for Village people of Sonala and students, in which he explained role of snake in ecosystem balance and agriculture (08/01/2015).
- **Awareness among Farmers**- College organized UGC sponsored workshop on ‘Sericulture-Training and Guidance’. About 400 students and farmers attended and took benefit of workshop (16/12/2010). Department of Microbiology organized ‘Organic farming awareness programme’, in which, street play and Poster presentation competition was held (12/01/2013).
- **Literacy Campaign**- During ‘International Literacy week (8-14 September)’ a special literacy campaign is observed for the illiterate children and adults of adopted village as well as slum areas of city. Slogan and Elocution competition are organized for college students to make them aware about citizen’s literacy.

- **Legal Guidance-** Every year honorable Judges and Lawyer from the District Court, Akola are invited as resource persons to provide constitutional guidance to college students and village peoples during NSS residential camp.

**\*Scientific Temper and Quest for Knowledge**

- National Science Day is celebrated to honor the great Indian Nobel laureate- Sir C.V. Raman for his invention of the ‘Raman effect’ on 28<sup>th</sup> February. On this occasion every year, Shri R. L. T. College of Science, Akola and Lokmat Yuva NXT jointly organize ‘Science project competition and exhibition: Science Pundit’ for the students of schools and colleges of Akola District. Participation and visit to such events give scientific knowledge of various phenomenon and enhance technical skill among learners and budding scientists.
- Number of teaching faculties has performed the duties of examiner or judges for various Taluka, District and State level Science Exhibitions, Science talks and meets organized by Government of Maharashtra, School Education Department and State Institute of Science Education, Nagpur. They share their experiences and knowledge with college students.
- Some of our B.Sc. students took advantage of INSPIRE (Innovation in Science Pursuit for Inspired Research) Scholarship scheme sponsored by Ministry of Science & Technology, Department of Science & Technology (DST), every year @ Rs.80,000/- each for five years (Total amount-Rs. 4,00,000/-)for undertaking Bachelor and Masters level education in the Natural & Basic sciences.
- College students participated in District, University and State level Research festivals, Avishkar as well as in National conferences to present their findings.
- Each department organizes guest lecturers of eminent persons of disciplines to know recent advances in their subjects.
- Department of Microbiology and Microbiology Society India (MSI) jointly organized State level Summit on ‘Pure water for better health’ for students in which competitions like essay writing, slogan writing, oral and poster presentations were included (10/10/2013). Participation in such activities definitely increases the depth of knowledge.

**\*Respect for Women**

College runs various activities for women upliftment. Few are summarized as-

- NSS unit regularly organized 'Women's Meet' at adopted village to focus on various women related issues. College undertook 'Nirbhay Bano Campaign' in collaboration with Akola District Police Department and Jijau Women and Child Development Society, at village Somthana (October, 2010)
- College students participated in 'Save Girl Child' rally (26/09/2011).
- Guidance of Asha Tare (President, Matrusewa Sangh, Akola) and Yogeeta Bharti was organized for girls and women on topic 'Foetus Rite and Emotional Balance' at village Yelwan (December, 2011)
- To propagate a message of Gender equality, College undertook campaign 'Jagar Janiwancha'. Under this campaign, various theme based programmes were organized during NSS residential camp (28/12/2012 to 4/01/2013) for people and students at village Yelwan. These programmes included popular Kirtan of Mr. Sanjay Kute, Recitation Programme by Prof. Khodwe and group, Ragini Music School Akola, Cultural Programmes by N.S.S volunteers , A debate competition on subject "Women Empowerment – Dream or Reality" , A drama ' My Loving Daughter' by Prof. Pradip Awchar and group, Zep Youth Foundation, Akola etc.
- On Independence Day, a special cultural programme based on the theme 'Save Girls' was organized for all stakeholders (15/08/2012).
- Female staff members and students participated in workshop on 'Women Harassment and related laws and possible remedies' at Police Headquarter, Akola (02/01/2013).
- Department of Physical Education organizes physical fitness training and provides free gymnasium facility for women staff and students in special batch. Free coaching is given in Judo, Wrestling and boxing.
- College has UGC sponsored Women's Hostel, where various programmes are conducted by girl students mentioning Indian tradition and women empowerment.
- Separate common/rest room and wash room are available for female students and staff.
- College committees like 'Grievance committee under code of conduct', Vishakha etc. are working for women welfare.



- Kranti Jyoti Savitribai Phule birth anniversary (3<sup>rd</sup> January ) is celebrated as Girls Day (Balika Din). Ma Jijau Birth anniversary (12<sup>th</sup> January) is celebrated to salute her mother qualities.

#### **\*Humanism**

- Every year NSS unit organized free health check up and medicine distribution camp for village people. This year blankets are distributed among the needy people of adopted village Sonala. Every year, study and sports material are provided to needy school students of village. Parent Teacher Association (PTA) of college distributes study material and uniform to needy and deserving students of college.
- Discharging noble responsibility towards society, every year college organizes Blood Donation camp in the memory of Late Principal M.G. Joshi (24<sup>th</sup> December). Microbiology and biochemistry department regularly contributes this event by testing blood parameters of staff and students. These departments also organized Blood group and Haemoglobin detection camp for girl students of Matrusewa Sangh hostel, Akola (12/02/2012).
- Poor students who want to study non granted subjects like Biochemistry, I.T. and Bioinformatics etc are given concession in college fees.
- Every year, Late Prime Minister Rajeev Gandhi's Birth Anniversary (20<sup>th</sup> August) is observed as 'Sadbhavana Din' to spread the message of humanity.

#### **\*Equality**

- All students have accepted college uniform to wear it regularly. Thus all are able to see that they are 'in the same boat'.
- Equal Opportunity Center (EOC) of college and SGB Amravati University jointly organized one day workshop on 'Fraternity' to social development of students from all category (13/10/2010).
- Our college and Department of Lifelong learning, SGB Amravati University jointly organized one day workshop for students on theme 'Nava Manus Ghadavu Ya'. Emphasis was given to build youth according to the dream of Rashtrasant Tukdoji Maharaj by acceptance of values like brotherhood and equality among the society (14/02/2015).

#### **\*Cleanliness**

- NSS Volunteers regularly observes cleanliness and plastic eradication campaign in college campus and adopted village.
- As per the mission started by Honourable Prime Minister, ‘Swachha Bharat Swasth Bharat Abhiyan’, and notification of Government of Maharashtra, a committee namely “MUNIJAN (Maharashtra University New Initiatives Joint Action Now)” is established in college. Under this mission, college organized and started activities from 20<sup>th</sup> Dec. 2014 (Death anniversary of Sant Gadge Baba). Cleanliness campaign is regularly performed from college premises to complete civil lines roads with active participation of students and staff.

#### **\*Self confidence and Dignity of Individual**

- As a part of internal assessment, B.Sc.II and B.Sc.III students have to deliver seminar on subject or related topics. Concerning teachers guided and deputed deserving students for various co curricular activities like seminar competition, poster competition, quiz and extracurricular events like elocution, debate, essay, sugam sangeet competition etc.
- Students conducted many programmes in college and especially during NSS, NCC camps. Students participated in youth festivals, various cultural programmes and sports events.
- Students actively take part in ‘Self Governance’ programme on Teacher’s Day (5<sup>th</sup>September)
- Students have freedom to express their views in college magazine “Pratibimb”.

All these activities increase self confidence of students and help to maintain their individual dignity.

#### **\*Courage and Discipline**

- NCC students participate in Army Attachment Camp, Annual Training Camp, National Integration Camp, Youth Exchange Programme (YEP) etc.
- Students also participate in Disaster Management Camp, Pre Republic Day Camp and Republic Day Parade at Rajpath, New Delhi.
- Swami Vivekananda’s Birth Anniversary (12<sup>th</sup>January) is celebrated as National Youth Day by arranging inspiring programmes for the young minds.
- Sport Adventure Tour is organized by Department of Physical Education to enjoy beauty of nature and trekking adventure experiences.

Participation in above activities is very helpful to develop values like Courage, Discipline, Team spirit and Punctuality.

**\*Leadership and Decision making**

- Deserving students are selected and nominated in Students Representative Council (SRC), in which Class Representatives (CR) of various classes, NSS and NCC Representatives, Cultural Representative and Ladies Representatives (LR) are given chance to lead their class or unit.
- Students Representatives are nominated on various committees like Grievance committee under code of conduct, Library committee, Editorial Board of college magazine 'Pratibimb' Hostel committee etc.
- Our student, Akshay Rathod represented college in 5<sup>th</sup> Bhartiya Chhatra Sansad organized by MAEER's MIT School of Government, Pune and Bhartiya Chhatra Sansad Foundation (10-12 January 2015).  
Above representations teaches students valuable skills like Democratic decision making, Cooperation, Friendship, Social justice and Team spirit etc.

**\*Personality Development**

Various personality development sessions are organized and conducted for students and staff. Some are listed as-

- Workshop on 'Career Management and Self Employment' (12/01/2011)
- Guidance lecture on 'Mission IAS' (17/09/2011)
- Guest lecture on 'Hospitality Management and Personality Development' (2011)
- District level workshop based on theme 'Life education through Sant Gadge Baba's Dashsutri and Rastrasant Tukadoji Maharaj's Gramgeeta' (07/12/2012).
- Workshop on Art of Living 'Yes+' (21-24/12/2012).
- General Knowledge Competition (25/01/2013)
- Guest lecture on 'Mast Raha No. 1 Vha' (06/07/2013)
- Personality Development workshop (08/10/2014)
- A Value Education Programme (07/02/2015)
- Guidance to Youth (Every year)
- Thought of the Week (Every Week)

**5. Evidence of success:**

In our Indian culture, values are definitely transported from parents to children simultaneously teachers also play a major role in percolation of values among their students.

In addition to the academic curriculum, the co-curricular activities are necessary for all round development of students. Students benefit from this innovative practice and they are enlightened by the talks related to ethics and moral values. They develop the habit of meditating which helps to sooth their mind. The most obvious evidence of success of this practice is percolation of the values in students like nationality, honesty, rule following, cleanliness,

improvement in human relations etc. The evidence of success is reflected in the day to day functioning of the college and overall reflection in personality development of student and staff. The students and staff are always ready to take responsibilities for organizing various programmes and events on and off the campus. We hope that this type of practice would help students to bring out the best of them and become able to lead a peaceful life.

As the evidence of their exemplary performance and contributions towards the society, the staff and students received appreciations by concerning authorities as –

- Appreciation by NSS Coordinator, Sant Gadge Baba Amravati University, Amravati for ‘organization of best NSS residential camp.’
- Appreciation and felicitation by Hon’ble. Shri Pravinkumar Padwad District Superintendent of Police, Akola for best contribution in ‘Nirbhay Bano Abhiyan’ for girls and women.
- Appreciation Award by IMA Akola for active participation of college in ‘IMA Walkathon’ for public awareness at Akola.
- Appreciation Award by SGB Amravati University for organizing blood donation camp. Every year our Principal and NSS Programme Officer are also appreciated and felicitated for the same by Dean, Govt. Medical College, Akola.
- Letter of thanks and appreciation by Hon. Directors or concerning authorities, for providing infrastructure and manpower for smooth conduction of various competitive examinations.
- Appreciation Award by Akhil Bhartiya Vidhyarthi Parishad for best contribution in ‘Mahakavi Kalidas Sangit Samaroh’, Akola.
- College has more proportion of girl students. They actively participated in various academic and cultural competitions when compared to the opposite gender and brought glory by winning number of awards and prizes in various competitions.
- Our students get selected and represented college as well as University in Republic Day Parade at Rajpath, New Delhi.

It is observed that, our value based science education empowers the moral of students increases their confidence to stand on every front of life. Thus, the mission of our college to develop students as citizens of high caliber induced with values, ethics and social responsibilities is fulfilled very well.

#### **6. Problems encountered and resources required:**

Our college is purely Science College. Due to semester pattern there is scarcity of time. But, ‘where there is will there is a way’.

As some of the students come from rural area, they hesitate to participate in group activity. So, in first year of degree course their involvement is not up to the expectations. But, once they started realizing the

cordial atmosphere in the college, they gradually show interest and play active roles.

Sometime insufficient funds create problems in effective implementation of activities. Organizing various outreach programmes involved heavy expenditure which is borne by the college and management. Many times staff members, parent teacher association, alumni association etc. consider this as their responsibility to the society and are willing whole heartedly to strengthen the activities to reach out the society with many more constructive programmes.

# **POST ACCREDITAION INITIATIVES**

## POST ACCREDITATION INITIATIVES

After the second cycle of assessment in February 2010, the college has initiated some new developmental activities related to teaching-learning process, infrastructural Issues, research and extension activities, student support system and governance in general.

Some of the important recommendations of the peer team that were Compiled which are as furnished below.

### **The college has complied with the following Peer Team recommendations:-**

1. For the recruitment of the vacant posts continuous correspondence is made with the joint director office and university, but there was a delay in getting the posts sanctioned due to some technical problem however due to continuous efforts of the college ten posts were sanctioned they were filled as per government norms. Out of appointment of vacant posts of Assistant Professors two posts are filled from SC category and due to non availability of ST and VJ-NT candidates two posts were remain vacant.
2. The entire laboratories are renovated during the last five years. All the laboratories are well equipped with latest apparatus and instruments. The details of infrastructural developments made during the last five years are mentioned in the same under heading infrastructural development.
3. Separate rest room and wash room for women staff is constructed in the girl's hostel.
4. Add on courses like CCLT, DCLT and ADCLT are running successfully. College has made many MOU's with different institutions and small industries. College has applied for some new courses to the university and UGC. The decisions are awaited.
5. ICT facilities are well developed during the last five years. Every department are equipped with LCD projectors. Every department is having their own computers with internet facility. INFLIBNET and Wi-Fi facility are made available in the college.  
In Library, Network Resource Centre is developed with six computers. Separate printer is provided for the students in NRC. College have developed virtual class room which attracts student towards effective teaching and learning. Video-conferencing is also made available in the auditorium for the audio-visual interactions among the institutions..
6. College has started many supportive services for the students i.e. Career guidance cell, Redressed Cell, Placement Cell, Anti-ragging Committee

and many more facilities. Soft skill in computer and English speaking workshop has been conducted in the college.

7. New Library is constructed above the chemistry laboratory with all the facilities. Number of text- books and reference books are increased. Each department has developed its own departmental library.
8. During the last five years Six class rooms, two laboratories and library have been constructed. The junior college working time is in the morning shift and senior college working hours are from 10.35 to 6.30 pm thus the overlapping of the two is avoided. However for smooth working of the college junior college classes are conducted in separate building (i.e. wing F).
9. Every department undergoes stock verification every year. Department wise budget allocation is made at the beginning of the college by Principal and HOD of respective department and it is then passed in LMC.
10. State Transport (S.T.) passes to be given to students who cannot stay at hostels in Akola but commute from the nearby villages. Also the college has started Girls Hostel from last two years. In addition to the above compliance the college has initiated the progressive steps in all spheres as shown below.

### **Curriculum Planning and Implementation:-**

- ❖ The college has introduced new courses as per the today's demand of education needs like B.Sc. information technology, B.Sc. Bio informatics and M.Sc. Microbiology in the academic year 2011 – 12.
- ❖ The college has adopted semester system for U.G. Level from 2010 – 11. Similarly there is CBCS pattern for PG programmes from 2010 – 11 as per the university direction.
- ❖ Curriculums of many subjects are revised as per the university directions.
- ❖ The principal of the college is on the board of studies of university, similarly all faculty members from department of chemistry and some members from other departments contributed to the process of restructuring of the curriculum either by being the Board of Study member or by attending the workshops based on curriculum designing for respective subjects.

### **TEACHING, LEARNING AND EVALUATIONS:-**

- ❖ The new Zoology research laboratory , P.G. laboratory of Microbiology have been developed and the three laboratories of chemistry, have been renovated by providing separate acid room, separate Non – Teaching staff room , one more staff room, separate balance room and chemical room.



- ❖ All the laboratories are well equipped with all the modern technical instruments, L.P.G. connection is kept outside the laboratory and safety knob is provided, which cover the accidental fear while working in laboratory.
  - The some of the major instruments added in different laboratories during the last five years are Ultrasonicator, U.V.-Visible and visible spectrophotometers, Auto-analyser, Soxhlet apparatus, Trinocular and binocular research microscopes, Flame photometer, Colorimeters, pH-meters, Water-de-ionizer, High precession melting point apparatus, Digital storage oscilloscopes, Cathode ray oscilloscopes, Audio frequency generators, Colour TV trainer, Desktops, Laptops, printers, LCD projectors, Telescope, Cameras etc.
- ❖ Six faculty members are awarded Ph.D. degree by S.G.B. Amravati University during the last five years.
- ❖ Six new faculty members are appointed out of which four are Ph.D. and two faculty members have passed SET/NET examinations.
- ❖ Individual teaching plan is the compulsory part of teacher's diary. Every faculty has to maintain the teacher's diary and accordingly he/she has to write the details of theory and practical classes engaged every day along with the other academic activities.
- ❖ One Major and Ten minor research projects have been sanctioned by the UGC to the college. Two proposals are awaited.
- ❖ One national conference, **13** workshop and seminars and **37** guest lectures are organized by the college during the last five years. One proposals of national conference and one for workshop have been submitted to the UGC
- ❖ **80** students received prizes in different Co-curricular activities, such as seminar, Avishkar, Inspire, Quiz competitions and others.
- ❖ Total **9** students stood in merit list of UG and PG degree awarded by Sant Gadge baba Amravati University Amravati.
- ❖ Each Department is facilitated by Teaching – Learning aids like chart, models, LCD Projectors. Over head projectors total 11 LCD projectors have been purchased in the college during last five years.
- ❖ Video conferencing virtual class rooms have been developed in the college.
- ❖ UGC-NRC – Centres is developed in the library with six computers and printer facility.
- ❖ New library is constructed with all facilities and thousands of books are purchased during four years.
- ❖ Science pundit competition is organized annually on National Science Day to cultivate scientific interest among the student and society.

- ❖ The prizes are given to the toppers which are announced by faculty member, alumni and others to motivate the students for learning.
- ❖ **32** field visits, educational tours and industrial visits are organized.
- ❖ Separate class rooms for P.G. classes, i.e. overall six new class room have been constructed to fulfil the need as per the number of students and programmes.

### **RESEARCH CONSULTANCY AND EXTENTION:**

- ❖ Zoology Research Laboratory has been developed, so as to cultivate the research environment among the students.
- ❖ **Two** faculty members are recognized as Ph.D. Supervisor in chemistry subject by the affiliating university /other university during last five years.
- ❖ **Six** faculty members are awarded Ph.D, 10 minor and one major research projects have been undertaken by the faculty and Rs. 24, 59,800/- have been received till date from the U.G.C in last four years.
- ❖ **95** papers have been published in different reputed peer reviewed national/ international journals and **168** papers have been presented by the faculty members in different national/ international journals.
- ❖ Under the guidance of the college supervisors, 06 Ph.D. are awarded in the last five years.
- ❖ **12** students registered for Ph.D. number in Mathematics, Microbiology and Chemistry department.
- ❖ College organized one national level conference. **13** workshops and seminars at university level.
- ❖ Extension activities are undertaken by different departments to spread the subject utility and importance for society.
- ❖ **05** M.O.U. are established with different industries/ research laboratories by the colleges.
- ❖ More than **54 %** faculties were having Ph. D. Degree and remaining all faculties are registered for their Ph.D.

### **INFRASTRUCTURE AND LEARNING PROCESS:-**

- ❖ Biochemistry lab is renovated in 2011-12 and is upgraded with all facilities. Separate cabins are provided to teaching and non – teaching staff members of the department.
- ❖ In order to meet an increasing need of pure drinking water, an additional water cooler /Aqua guard are installed near zoology department, physics laboratory, electronics department and near room no. 17, 18.
- ❖ Post graduation and research laboratory of chemistry have been renovated and upgraded in 2012 – 13.
- ❖ The water proofing work of room no. 4, 5, 6, 13 and 14 and girls common room have been done.
- ❖ College has developed gymnasium with all sports facilities.

- ❖ Botanical garden is upgraded and is renovated.
- ❖ Network resource centre have been establish in the library of the college.
- ❖ Boy's toilet is renovated.
- ❖ College auditorium hall has been renovated with all the modern facilities like, turbo ventilation and duct cooling system and providing projector Screen
- ❖ Smart Rooms are developed for effective Teaching and Learning.
- ❖ Girl Hostel is constructed with all necessary facilities.
- ❖ Physics Laboratory was renovated.
- ❖ An antechamber has been constructed behind principal Cabin and principal Cabin was renovated.
- ❖ Room No. 1, 2, 3 have been renovated with cooling system.
- ❖ Room No. 11 is converted into microbiology laboratory for post graduate classes of microbiology and is also used as microbiology research laboratory.
- ❖ 6 new rooms (room no. 21 to 26) have been newly constructed for P.G. classes.
- ❖ Mathematics department is also newly constructed.
- ❖ The new compound wall is constructed to give a college a new look.
- ❖ The height of the side wall of the college compound from the side of Sitabai Arts College has been increased for comfortable working of college.
- ❖ Zoology research laboratory has been constructed to cultivate research environment among the students.
- ❖ Botany, Zoology laboratories have been renovated and more facilities are provided in laboratory.
- ❖ Library is shifted to the 1<sup>st</sup> floor of Chemistry laboratory. More number of books and all the facilities are provided to the students.
- ❖ All the departments are provided with the LCD projectors
- ❖ All the departments have been provided with the computer and internet facility.
- ❖ Maximum faculty members have purchased laptop for the departmental use under UGC scheme.
- ❖ Water Proofing of Administrative building is done.
- ❖ Separate record room has been developed near the botany laboratory.
- ❖ E – Resources and CD's are procured and INFLIBNET and SOUL are introduced in library.
- ❖ In Library, Xerox facility and Printing facility are made available.
- ❖ Separate IQAC room is established near the principal office with all the facilities like computer, printer, scanner, etc.
- ❖ **16** – CCTV cameras have been installed in the college to cover all college campus for security.
- ❖ Electronic Display board to display various notices has been fixed on the entry level.

- ❖ Laboratories are well equipped with instrument apart from other grants college.

### **STUDENT SUPPORT AND PROFESSION :-**

- ❖ A number of welfare scheme are offered to students.
- ❖ Best student of the year, award, toppers of chemistry/ math are felicitated by the faculty members and alumni thereby motivating the students for academic excellence.
- ❖ The college has established the student grievance redressal cell, Anti ragging committee, Vishakha committee as per the government norms and the university direction.
- ❖ The career counselling cell has been established and coaching class for entry in services and NET-SET coaching in mathematics are regularly working. These are UGC financed merged schemes of UGC XI plan.
- ❖ During the last five years 02 students passed NET/SET examinations.
- ❖ During the last five years near about 25-30 students have been appointed in different government services.
- ❖ Students are motivated to participate in sport, cultural and extracurricular activities Overall **170** prizes have been awarded to the students activities in various extracurricular, sports and games activities
- ❖ **1124** students have been benefited by the Government Sponsored Scholarship of total Rs. **25,85,200/-** and **606** students have been benefited by Government Sponsored Concession and other financial assistance from state /central government with total amount **7,22,171/-**. The institute level financial assistance is also provided with the contribution of alumni and faculty.
- ❖ Office working is made computerised with newly purchased master software.
- ❖ Regular performance appraisal is carried out every year.
- ❖ The IQAC prepare and send AQAR regularly.

### **GOVERNANCE LEADERSHIP AND MANGEMENT:-**

- ❖ College has setup IQAC to work towards quality enhancement in academic and administrative activities.
- ❖ College has LMC body and annual meetings are organized regularly to design planning and to review the academic and administrative policy decisions.
- ❖ College staff council and student's council (SRC) meetings are conducted from time to time.
- ❖ The decisions made during the different meetings are conveyed to all the stake holders through regular concerned meeting.

- ❖ For the effective functioning of college, more than 40 college level committees have been established.
- ❖ College provides many welfare schemes for teaching and non – teaching staff. For Example: - uniform washing allowance for non teaching staff, group insurance policy for teaching and non-teaching staff and medical facilities with different schemes etc.
- ❖ Faculty members fill in performance appraisal forums yearly regularly
- ❖ The IQAC has organized several program workshops for preparation of S.S.R.

### **INNOVATIONS AND BEST PRACTICES:**

- ❖ College has started the best practice of making ‘**Green Audit**’ of college campus by local non government organization ‘Shrustivaibhav’.
- ❖ College has been taken initiatives to keep the **campus pollution free** through various activities, some of which are highlighted below-
  1. Tree plantation is regularly done in the college every year.
  2. Plastic cups are replaced by paper cups in canteen.
  3. No vehicle day is strictly observed on 1<sup>st</sup> and 15<sup>th</sup> of every month.
  4. To save paper, most of the notices are circulated through email.
    - Biometric facility is installed in the college.
    - **Electronic Display board** to display various notices has been fixed at the entrance.
    - **I-Card** culture is developed for students and faculty members both and is made compulsory.
    - To monitor the Campus activities discipline Committee is working and **16 CCTV** cameras have been installed at various places in the college campus.
    - Though it is a science college many **value based programmes** and workshop have been arranged during the last five years.
    - Reduced Electricity consumption is reduced due to installation of ‘**Solar water heater**’ in girl’s hostel and **Automatic solar based LED lights**’ in college campus. college management is also planning to install solar panels to generate electricity for electrical gadgets.
- **Sky Observation Club** of college generates curiosity and inspires young minds of our science students to contribute the understanding of world around us.

- A **Stand by generator** facility is made available in the college and inverters are purchased for all the departments.
- ‘Swachh Bharat – Swasth Bharat’ scheme was launched in college and is successfully working.



The Berar General Education Society's, Akola  
(Regd. No. F65 B'bay Public Trust Act.)

**SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL COLLEGE OF SCIENCE,  
(R.L.T. COLLEGE OF SCIENCE)  
CIVIL LINES, AKOLA - 444 001 MAHARASHTRA**

**: Recognized By :**

Govt. of Maharashtra & Permanently Affiliated to S. G. B. Amravati University, Amravati.

Ph. No. 0724 - 2414049, 2415480

Fax -0724 - 2415650, Post Box No.60

**NAAC REACCREDITED  
GRADE "B"  
WITH CGPA 2.59**

E-mail: [principal@rltsc.org](mailto:principal@rltsc.org)

Website : [www.rltsc.org](http://www.rltsc.org)

### **Declaration by the Head of the Institution**

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

( Dr. V.D. Nanoty )

**Principal  
Radhakisan Laxminarayan Toshniwal  
College of Science  
(Shri R.L.T. College of Science, Akola)**

**Date :- 26/02/2015**

**Place :Akola**



The Berar General Education Society's, Akola  
(Regd. No. F65 B'bay Public Trust Act.)

**SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL COLLEGE OF SCIENCE,  
(R.L.T. COLLEGE OF SCIENCE)  
CIVIL LINES, AKOLA - 444 001 MAHARASHTRA**

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**NAAC REACCREDITED  
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WITH CGPA 2.59**

E-mail: [principal@rltsc.org](mailto:principal@rltsc.org)

Website : [www.rltsc.org](http://www.rltsc.org)

## Certificate of Compliance

This is to certify that **Shri Radhakisan Laxminarayan Toshniwal College of Science (Shri R.L.T. College of Science, Akola)** fulfils all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

( Dr. V.D. Nanoty )  
Principal

**Radhakisan Laxminarayan Toshniwal  
College of Science  
(Shri R.L.T. College of Science, Akola)**

**Date :- 26/02/2015**

**Place :Akola**



# **ANNEXURE**

## Annexure I : Approval of Course of Affiliating University

श्री मोहन बुढवगा / श्री 5131  
नोद छावी  
5/5/2010

**SANT GADGE BAB  
AMRAVATI UNIVERSIT  
AMRAVATI - 4446C  
(M.S**

☎ : 2662206, 2662207, 2662208, 2662249, 2662358  
website : www.sgbau.ac.in

FAX NO. 0721-2660949, 2662135      GRAM : AMUN

To: ✓ The Principal,  
R.L.T. College of Science,  
Akola.

No.: SGBAU/8/C-<sup>370</sup>/2010,  
Dt.: 30.4.2010  
415      SHRI R.L.T. COLLEGE OF SCIENC  
AKOLA  
Inward No. 52  
Dated 05/05/2010

**Subject :- Permanent Affiliation under Section 88 of Maharashtra Universities Act, 1994 regarding.**

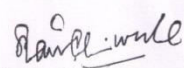
Refrence :- Your letter dated 29.12.2008

Sir,

With reference to your letter cited above, it is to inform you that, the Academic Council of Sant Gadge Baba Amravati University, in its meeting held on dated 20.2.2010 vide item No.8 resolved to grant Permanent Affiliation to your college for courses / subjects as mentioned in the following table, from the session 2009-2010, subject to the fulfillment of the conditions as mentioned below :-

1. Even though your college / Institutions is granted Permanent Affiliation it shall continue to pay annual affiliation fee as prescribed in Direction No. 39/2004, dated 20.10.2004.

Sr. No.	Course/s	Subject/s
1.	B.Sc.	Zoology, Physics, Electronics, Microbiology, Mathematics, Botany, Chemistry, Computer Science, Bio-Chemistry.
2.	M.Sc.	Mathematics.

Yours faithfully,  
  
Director.(BCUD)  
Sant Gadge Baba  
Amravati University.

**Copy with compliments to :-**

1. Director of Higher Education, Maharashtra State, Pune-1
2. Joint Director of Higher Education, Amravati Region, Amravati.
3. Controller of Exam, Sant Gadge Baba, Amravati University, Amravati.
4. Finance & Accounts Officer, Sant Gadge Baba, Amravati University, Amravati.
5. Director of Student Welfare, Sant Gadge Baba, Amravati University, Amravati.
6. Asstt. Registrar (Devp), Sant Gadge Baba, Amravati University, Amravati.

f/pa/11

**Annexure II : UGC 2f AND 12B CERTIFICATE**

Ph. 23236351, 23232701, 23237721, 23234116  
23235733, 23232317, 23236735, 23239437  
UGC Website: www.ugc.ac.in

श्री. पी. टी. कॉलेज ऑफ  
साइंस अकोला  
3729  
17/9/07

F. 8-279/2005 (CPP-I)

विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली 110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002  
August, 2007

03 SEP 2007

The Principal,  
Shri Radha Krishnan Laxmi Narayan  
Toshinwal College of Science,  
Akola,  
District Akola-444 001 (M.S).

Sub:- Inclusion of Colleges under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

With reference to your letter No. 1886 dated 13.6.2007 on the above subject  
I am directed to say that the name of RLT College of Science, Akola is already  
included in the list of Colleges prepared under Section 2 (f) & 12 (B) of the UGC Act,  
1956 as "Shri Radha Krishnan Laxmi Narayan Toshinwal College of Science, Akola,  
District Akola (M.S)" (S.No. 51 Page 354 in the Directory of Colleges).

Yours faithfully  
*Urmil Gulati*  
(Mrs. Urmil Gulati)  
Under Secretary

Ph. 23236351, 23232701, 23237721  
23234116, 23235733, 23232317  
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)  
UGC Website: [www.ugc.ac.in](http://www.ugc.ac.in)  
F. No. 8-279/2005 (CPP-I/C)



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

SHRI R.L.T. COLLEGE OF SCIENCE February, 2015  
AKOLA

Inward No. 2990  
Date 20/02/2015  
112 FEB 2015

The Registrar,  
Sant Gadge Baba Amravati University,  
Amravati - 444 602,  
Maharashtra.

**Sub:** Upgradation of "Shri Radhakisan Laxminarayan Toshniwal College of Science (R.L.T. College of Science), Civil Lines, Akola – 444 001, Maharashtra" from UG to PG under section 2(f) & 12(B) of the UGC Act, 1956".

Sir,

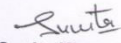
With reference to the letter no.122 dated 21.11.2014 received from the Principal, **Shri Radhakisan Laxminarayan Toshniwal College of Science (R.L.T. College of Science), Civil Lines, Akola – 444 001, Maharashtra** on the above subject, I am directed to say that ~~name of~~ the above College established in 1970 affiliated with **Sant Gadge Baba Amravati University, Amravati** already included in the list of Colleges maintained under Section 2 (f) & 12 (B) of the UGC Act, 1956 has been upgraded from the head 'Non-Government, Aided Colleges teaching upto Bachelor's degree to Master's degree'.

Yours faithfully,

(Charan Dass)  
Under Secretary

Copy to:-

1. The Principal, Shri Radhakisan Laxminarayan Toshniwal College of Science (R.L.T. College of Science), Civil Lines, Akola – 444 001, Maharashtra.
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhavan, New Delhi – 110 001.
3. The Principal Secretary, Tech. & Higher Education Deptt., Government of Maharashtra, Mantralaya, Annexe Building, Mumbai – 400 032, (Maharashtra)
4. The Deputy Secretary, UGC, Western Regional Office (WRO), Ganeshkhind, Poona – 411 007, (Maharashtra).
5. Publication Officer (UGC-Website), New Delhi.
6. Section Officer (FD-III Section), UGC, New Delhi
7. Guard file.

  
(Sunita Khanna)  
Section Officer

WST 14/5/87

UNIVERSITY GRANTS COMMISSION  
BAHADUR SHAH ZAFAR MANS  
NEW DELHI

No.F.8-43/87(OPP-I)

Dated: \_\_\_\_\_

To

The Registrar,  
Amravati University,  
Amravati - 444674.

MAY 1987

Sub:- Preparation of list of colleges under Section 2(f)  
of the University Grants Commission Act, 1956.

Sir,

I am directed to refer to your letter No.AU/6-D/UGC/Coll/  
261/P/378/87 dated 17/11.2.1987 on the above subject and  
to say that the names of the following colleges have been  
transferred from the head "Non-Government/Government Colleges  
teaching upto Bachelor's Degree" to the head "Non-Government/  
Government Colleges teaching upto Post-graduate Degree" in  
the list of colleges prepared under Section 2(f) of the  
University Grants Commission Act, 1956:-

S.No.	Name of the College	Year of Estt.
1.	Adarsh Science, Adarsha Jairamdas Dagchand Arts & Birla Commerce College Dhamangan (City) Distt. Amravati. (On temporary affiliation upto June,1990) Shri R.R. Kulkarni	1961
2.	Amolakchand Mahavidyalaya Yeotmal (On temporary affiliation upto June,1990) Dr. V.M. Peshwe	1956
3.	Bar Ramrao Deshmukh Arts & Smt. Inderaji Kanadiya Commerce College, Bandnera (Distt. Amravati) (On temporary affiliation upto June,1990) Shri B.D. Hiwase	1972
4.	Bharatiya Mahavidyalaya Amravati (On temporary affiliation upto June,1990) Shri G.S. Vaidya	1963
5.	Loknayak Banuj Aney Mahila Mahavidyalaya Yeotmal - 445711 (On temporary affiliation upto June,1990) Shri J.K. Bhat	1971

Shri. Jaykumar to WST  
WST

-----2/-

2

6. Mahatma Fuley Arts, Commerce & Sitaramji Choudhari Science Mahavidyalaya Warul-444976 (Distt. Amravati (MS)) (On temporary affiliation upto June, 1997) Dr. S.N. Patil 1969
7. Mahila Mahavidyalaya, Amravati (On temporary affiliation upto June, 1997) Smt. Manik Patil 1965
- ✓ 8. R.L.T. College of Science Akola (On temporary affiliation upto June, 1997) Shri M.G. Joshi. 1970
9. Smt. Laxmi Bai Rastogi College of Commerce, Akola (On temporary affiliation upto June, 1997) Shri K.G. Gandhi 1964
10. Smt. Radhalevi Goenka College for Women Akola-447071 (MS) (On temporary affiliation upto June, 1997) Smt. Kumudini Lal 1965
11. Shri Shivaji College of Education Amravati (On temporary affiliation upto June, 1997) Dr. K.T. Mehare. 1961
12. Sitabai Arts College Civil Line, Akola-444701 (On temporary affiliation upto June, 1997) Shri S.C. Patnayak 1938
13. The Jijamata Mahavidyalaya Bullana (On temporary affiliation upto June, 1997) Shri H.S. Chavan 1956
14. Government College of Education Akola-444701 (On temporary affiliation upto June, 1997) Shri V.T. Deshpande. 1956

Yours faithfully,  
*C.M. Ramachandran*  
( C.M. RAMACHANDRAN )  
DEPUTY SECRETARY

Copy to:-  
1. The Principal, Alkash Science, Adarsha Jaisankar  
2. The Principal, Arts & Birla Commerce College, Phansgaon (R)  
Distt. Amravati.

.....3/-

: 3 :

2. The Principal, Amolakehand Mahavidyalaya  
Yestmal.
3. The Principal, Bar Ramrao Deshmukh Arts & Smt.  
Indaraji Kapadiya Commerce College, Danthra (Distt.  
Amravati)
4. The Principal, Bharatiya Mahavidyalaya, Amravati.
5. The Principal, Loknayak Dapuj Aney Mahila Mahavidyalaya,  
Yestmal -445001.
6. The Principal, Mahatma Fuley Arts, Commerce &  
Sitaramji Choudhari Science Mahavidyalaya, Warud-444906  
(Distt. Amravati).
7. The Principal, Mahila Mahavidyalaya, Amravati.
8. ✓ The Principal, R.L.T. College of Science, Akola.
9. The Principal, Smt. Laxmi Bai Radhakrishnan Tooniwal  
College of Commerce, Akola.
10. The Principal, Smt. Radhadevi Goenka College for Women,  
Akola-444001 (MS).
11. The Principal, Shri Shivaji College of Education,  
Amravati.
12. The Principal, Sitabai Arts College, Civil Line,  
Akola-444001
13. The Principal, The Jijamata Mahavidyalaya, Buldana.
14. The Principal, Government College of Education,  
Akola-444001
15. All Officers/Sections in the UGC Office.
16. Incharge, Computer Section, UGC, New Delhi.
17. S.O., Accts.& Section, UGC, New Delhi.
18. Guard file.

( D.S. SINGH )  
SECTION OFFICER

**Annexure III : LATASST CERTIFICATE OF XII<sup>TH</sup> PLAN GRAND ALLOCATION.**

विश्वविद्यालय अनुदान आयोग  
पश्चिम विभागीय कार्यालय  
गणेशखिंड, पुणे - ४११००७  
University Grants Commission  
Western Regional Office  
Ganeshkhind, Pune - 411007.



दूरभाष Phone: कार्यालय OFF:- 020 - 25696897  
020 - 25691178

फॅक्स Tele Fax.: 020 - 25691477  
Website - www.ugc.ac.in

F. No 4-32/13(WRO)

Date: 27.03.2014

The Principal,  
Shri Radhakisan Laxminarayan Toshniwal College Of Science (R.L.T. College Of Science),  
Civil Lines,  
Akola,  
Akola - 444001.

SHRI R.L.T. COLLEGE OF SCIENCE  
AKOLA

Inward No. 9614

Dated 16/04/2014

Subject: XII Plan allocation under General Development Assistance to Colleges.

Sir/Madam,

I am directed to convey the approval of the UGC to Shri Radhakisan Laxminarayan Toshniwal College Of Science (R.L.T. College Of Science), Akola, Akola- 444001 the XII plan allocation of Rs.3358200/- under the "General Development Assistance" for the development of undergraduate and postgraduate education. The UGC in the XII Plan has decided to provide grants under General Development Assistance as 'Block Grant'. The college will have the flexibility to incur expenditure under the following heads as per the needs of the college. Accordingly, grant allocated under GDA to the college is under two object heads viz. Grant-in-aid General (31) and Capital Assets (35).


Capital Assets (35) 80% of total allocation	Grant-in-aid General (31) 20% of total allocation	Total
Rs.2686560/-	Rs.671640/-	Rs.3358200/-

- The above mentioned allocation is meant for the development of undergraduate and postgraduate education.
- The college has to constitute a Planning Board with Principal as Chairman and Heads of departments, IQAC Coordinator, Librarian & Bursor/Senior person from the Accounts department as members
- The Planning Board will finalize allocation to Undergraduate and Postgraduate departments after identifying the heads and deciding on priorities of departments.
- The eligibility criteria for Undergraduate and Postgraduate departments to get assistance under the scheme is given in the XII plan guidelines for Development grant to colleges.
- The Planning Board may refer to the guidelines before finalizing allocation to Undergraduate and Postgraduate departments
- After finalizing the budget allocation for Undergraduate and Postgraduate education, the Planning Board should submit the details as per Annexure - I and Annexure - II in the XII plan guidelines to the UGC (WRO), Pune latest by 30<sup>th</sup> June 2014.
- Expenditure on construction, extension, and renovation of building should not exceed 50% of the total grant under GDA. The college must inform the requirement of funds or otherwise for construction, extension, and renovation of building before 30<sup>th</sup> June, 2014 to enable further release of grant under the scheme.
- UGC has already released adhoc on account grant to the college against this XII Plan allocation.



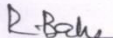
- The concept of Merged Schemes introduced during the XI Plan has been done away with and no separate grant under the Merged Schemes will be provided during the XII Plan.
- It is also mentioned here that the following schemes which were earlier part of Merged Scheme now will be implemented independently by a dedicated cell of UGC at Head Quarter, New Delhi and separate grant will be provided by UGC under these schemes.
  - (i) Equal Opportunity Cell.
  - (ii) Remedial Coaching for SC/ST/OBC (non-creamy layer) and minority community students.
  - (iii) Coaching for NET for SC/ST/OBC (non-creamy layer) and minority community students.
  - (iv) Coaching Classes for Entry into services for SC/ST/OBC (non-creamy layer) and minority community students.
  - (v) Scheme for persons with disabilities.

Yours sincerely,

  
[Dr. (Mrs.) Renu Batra]  
Joint Secretary.

Copy to:

1. The Director BCUD/CDC University of Amravati
2. The Director, Higher Education, Govt of Maharashtra, Central Building Pune-1.
3. Account General, Govt of Maharashtra state, 101, Maharshi Karve Marg, Mumbai -20.
4. Guard file.

  
[Dr. (Mrs.) Renu Batra]  
Joint Secretary.

**Annexure IV : MASTER PLAN OF THE INSTITUTION**




<p><b>WING D</b></p> <p><b>GROUND FLOOR</b>                      I Q A C ROOM                      PRINCIPAL CABIN AND ANTE CHAMBER                      SUPERINTENDENT'S CABIN                      ADMINISTRATIVE OFFICE                      ACCOUNTANT'S CABIN                      TOILET (GENT'S STAFF)                      LIBRARY (OLD) AND CONSUMER CO - OP. STORE                      DRINKING WATER COOLER -1                      PARKING FOR STAFF</p> <p><b>FIRST FLOOR</b>                      IT/BIOINFORMATICS LAB                      COMPUTER LAB1&amp;2                      DEPTT. STAFF ROOM                      LADIES TOILET                      MICROBIOLOGY LAB (P. G )                      DEPTT. STAFF ROOM (MICROBIOLOGY)                      ASCEPTIC ROOM                      INSTRUMENT ROOM                      MICROBIOLOGY LAB                      NON TEACHING STAFF ROOM                      READING ROOM</p> <p><b>SECOND FLOOR</b>                      N.S.S / N.C.C OFFICE &amp; DEPARTMENT                      OF PHYSICAL EDUCATION                      CLASS ROOM NO.12,13 &amp;14                      STORE ROOM                      ELECTRONICS LAB                      MICROPROCESSOR ROOM                      DEPTT.STAFF ROOM                      SEMINAR ROOM</p> <p><b>THIRD FLOOR</b>                      TERRACE WITH SIX WATER TANKS</p> <p><b>WING E</b></p> <p><b>GROUND FLOOR</b>                      R.L.T COLLEGE SALARY EARNER'S                      CREDIT SOCIETY OFFICE                      CLASS ROOM NO.7 ,8 ,GYMANASIMUM HALLS (2)                      TEMPLE                      BOY'S TOILET                      CYCLE STAND FOR STUDENTS</p> <p><b>FIRST FLOOR</b>                      CLASS ROOM NO.15 &amp; 16</p> <p><b>SECOND FLOOR</b>                      CLASS ROOM NO 17 &amp; 18</p> <p><b>WING F</b>                      WOMENS HOSTEL                      WOMENS TOILET</p>	<p><b>WING C</b></p> <p><b>GROUND FLOOR</b>                      PORCH AND ENTRANCE                      MEETING ROOM / EXAM. OFFICE                      CHEMISTRY LAB (P. G )+ RESEARCH                      CHEMISTRY LAB 1 WITH DEPTT. STAFF ROOM                      (TEACHING / NON TEACHING)                      CHEMISTRY LAB NO. 2 &amp; 3 WITH STAFF ROOM,                      ACID ROOM , CHEMICAL ROOM , GAS CHAMBER                      NON TEACHING STAFF ROOM                      WATER COOLER                      LADIE'S STAFF ROOM                      CANTEEN, BOTANICAL GARDEN, LUNCH SHADE</p> <p><b>FIRST FLOOR</b>                      BIOCHEMISTRY LAB                      CLASS ROOM NO. 4 , 5 &amp; 6                      DEPTT.OF LANGUAGES</p> <p><b>SECOND FLOOR</b>                      DEPARTMENT OF MATHEMATICS                      CLASS ROOMS 21,23,24,25,26                      ASTRONOMICAL GALLERY</p> <p><b>WING B</b></p> <p><b>GROUND FLOOR</b>                      PHYSICS LAB 1, 2 &amp; 3                      DARK ROOM (PHYSICS)                      DEPTT.STAFF ROOM (PHYSICS)                      STAFF ROOM (NON TEACHING)</p> <p><b>FIRST FLOOR</b>                      BOTANY LAB                      DEPTT. STAFF ROOM (BOTANY)                      ZOOLOGY LAB                      DEPTT.STAFF ROOM (ZOOLOGY)                      F.W.F.C LABORATORY</p> <p><b>SECOND FLOOR</b>                      CLASS ROOM NO. 1,2 &amp; 3                      STUDENT COUNCIL ROOM                      STORE ROOM</p> <p><b>WING A</b></p> <p><b>GROUND FLOOR</b>                      AUDITORIUM , SPORTS ROOM , LIGHT                      &amp; SOUND CONTROL ROOM                      LADIE'S STAFF TOILET</p> <p><b>FIRST FLOOR</b>                      GIRLS COMMON ROOM                      GIRLS TOILET                      RECORD ROOM                      ZOOLOGY RESEARCH LAB</p>
<p>MASTER PLAN OF THE R.L.T . COLLEGE CAMPUS INDICATING                      THE EXISTING INFRASTRUCTURE</p>	<p style="text-align: center;"></p> <p>AMIT RATHI &amp; ASSOC.                      ARCHITECTS , INT DESG, VALUERS                      PH NO. 0724 - 2444791                      AKOLA . (M.S )</p>

**Annexure V : CERTIFICATE OF ACCREDITATION 2<sup>nd</sup> CYCLE**



## Annexure VI : QUALITY PROFILE



**राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद**  
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान  
**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**  
An Autonomous Institution of the University Grants Commission

## Quality Profile

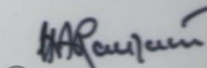
**Name of the Institution** : The Berar General Education Society's  
Shri Radhakisan Laxminarayan Toshniwal College of Science  
**Place** : Akola, Maharashtra


Criteria	Weightage (W <sub>i</sub> )	Criterion-Wise Grade Point Averages (Cr, GPA)	W <sub>i</sub> X Cr, GPA
I. Curricular Aspects	050	2.90	145
II. Teaching-Learning and Evaluation	450	2.76	1242
III. Research, Consultancy and Extension	100	2.30	230
IV. Infrastructure and Learning Resources	100	2.20	220
V. Student Support and Progression	100	2.60	260
VI. Governance and Leadership	150	2.30	345
VII. Innovative Practices	050	3.00	150
<b>Total</b>	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 W_i X Cr, GPA = 2592$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i X Cr, GPA)}{\sum_{i=1}^7 W_i} = \frac{2592}{1000} = \boxed{2.59}$$

Grade =  Descriptor =

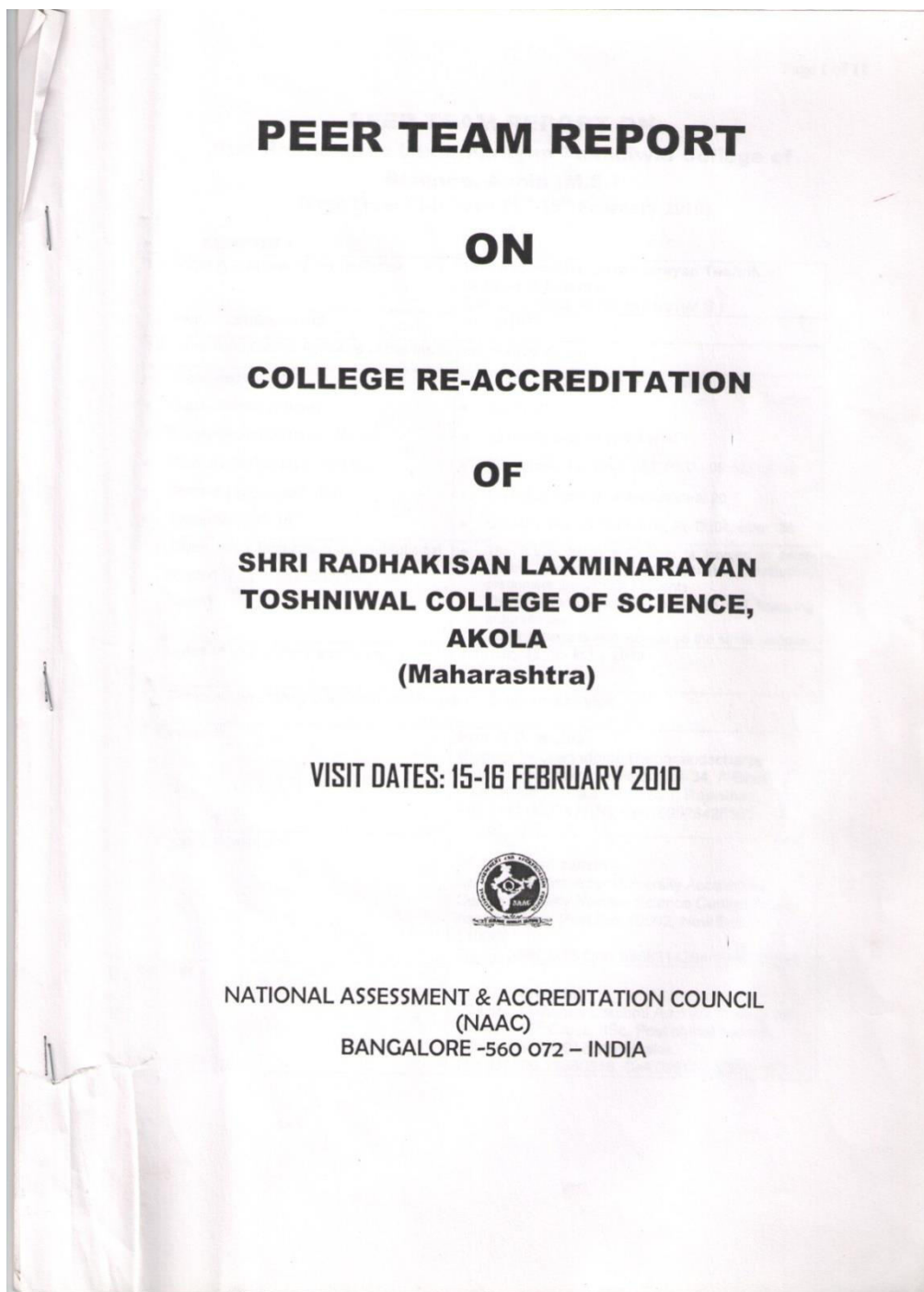
Date : March 28, 2010

  
 Director



- This certification is valid for a period of Five years with effect from March 28, 2010
- An institutional CGPA on four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.51 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
- Scores rounded off to the nearest integer

**Annexure VII : PEER TEAM REPORT 2<sup>nd</sup> CYCLE**



**SECTION-II: Criterion wise**

<b>2.1 CURRICULAR ASPECTS</b>	
2.1.1 Curricular Design and Development	<ul style="list-style-type: none"> <li>• Courses offered are in line with vision and Mission of the institution.</li> <li>• Curriculum is designed by the University.</li> <li>• 4 faculty members are on board of studies of the University.</li> </ul>
2.1.2 Academic Flexibility	<ul style="list-style-type: none"> <li>• 09UG, 1PG, 3 Ph.D. and 02 M.Phil. programs are offered.</li> <li>• Add-on courses such as C, C++, VB and a course on CLT exits.</li> </ul>
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> <li>• Feedback from the stake holders.</li> <li>• Faculty take initiative in utilizing the feedback for further improvement in the curriculum.</li> <li>• Faculty members communicate feedback to the relevant academic bodies of the University through the Members of board of studies.</li> </ul>
2.1.4 Curriculum update	<ul style="list-style-type: none"> <li>• Syllabus is revised as per the university and UGC guidelines.</li> <li>• A few courses at UG level are modified.</li> <li>• B.O.S. takes initiative in redesigning the syllabus.</li> </ul>
2.1.5. Best Practices	<ul style="list-style-type: none"> <li>• Question banks are given to students.</li> <li>• Model papers are available to the students.</li> </ul>
<b>2.2. TEACHING-LEARNING &amp; EVALUATION</b>	
2.2.1 Admission Process and Student Profile	<ul style="list-style-type: none"> <li>• Admission notification advertised on website, regional newspapers.</li> <li>• Admission to degree courses are done as per university norms.</li> <li>• Being junior college attached to this, first preference is given to in-house students.</li> <li>• Special support/subsidy to be extended to attract students from weaker sections.</li> </ul>

2.2.2. Catering to the Diverse Needs	<ul style="list-style-type: none"> <li>• Weak and slow learners are identified and faculty help such students in their studies.</li> <li>• Mentoring system for the guidance and counseling of the students.</li> <li>• College provides infrastructure for differently abled students.</li> </ul>
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> <li>• Academic calendar and teaching plan are prepared at the beginning of the academic year.</li> <li>• Lecture method is predominant method of teaching.</li> <li>• Modern Technology needs to be strengthened in teaching-learning process.</li> </ul>
2.2.4 Teacher Quality	<ul style="list-style-type: none"> <li>• The faculty recruitment is based on government and University rules.</li> <li>• Out of 21 teachers, 5 teachers are having Ph.D., 9 teachers are M.Phil. and 4 teachers are having NET/SET.</li> </ul>
2.2.5 Evaluation Process and Reforms	<ul style="list-style-type: none"> <li>• Faculty development programme is carried out through Orientation programmes, refresher programmes, seminars and conferences.</li> <li>• faculty should be recruited on permanent basis in self financing courses.</li> <li>• The college follows annual/semester examination pattern as per university norms.</li> <li>• Unit tests are periodically conducted.</li> <li>• Internal examinations and evaluations are transparent and grievance redressal mechanism is in vogue.</li> </ul>
2.2.6 Best Practices in Teaching-Learning & Evaluation	<ul style="list-style-type: none"> <li>• Management encourages research activity by giving financial help.</li> <li>• The staff members are encouraged to participate in seminars, conferences and training programmes.</li> </ul>



<b>2.3 RESEARCH, CONSULTANCY AND EXTENSION</b>	
2.3.1 Promotion of Research	<ul style="list-style-type: none"> <li>• Formation of research committee</li> <li>• Considerable numbers of faculty members are involved in research.</li> <li>• Microbiology, chemistry laboratories and mathematics are approved by university as research centers leading to Ph.D.</li> </ul>
2.3.2 Research and Publication output	<ul style="list-style-type: none"> <li>• 01 book and 43 research publications are published.</li> <li>• 04 ongoing minor research projects and 1 completed, sponsored by UGC.</li> <li>• There are 03 recognized guides who have produced 03 Ph.D. students, 04 have registered for Ph.D. and 04 have registered for M.Phil.</li> </ul>
2.3.3 Consultancy	<ul style="list-style-type: none"> <li>• Some teachers are involved in consultancy.</li> <li>• Consultancy services at informal level.</li> </ul>
2.3.4 Extension Activities:	<ul style="list-style-type: none"> <li>• NCC and NSS Cadets are vibrant and involved in activities such as tree plantation, Blood donation camps, health checkup, legal aid programme to villages and also help in detecting hardness of water.</li> <li>• NCC Cadets have participated in republic day parade and best Cadets are awarded. 01 cadet visited Sri Lanka under Youth Exchange Programme.</li> </ul>
2.3.5 Collaboration	<ul style="list-style-type: none"> <li>• Linkages with industries and other institution to be established.</li> </ul>
2.3.6 Best Practices in Research, Consultancy and Extension	<ul style="list-style-type: none"> <li>• Awareness among women through NSS is evident.</li> <li>• NCC cadets are participating in RD parade.</li> </ul>

<b>2.4 INFRASTRUCTURE AND LEARNING RESOURCES</b>	
2.4.1 Physical facilities for learning	<ul style="list-style-type: none"> <li>• There are 17 class rooms and 11 laboratories, spacious auditorium, Library, separate resting room for staff and students are available in the college.</li> <li>• For differently abled students railings are provided which is commendable.</li> <li>• College infrastructure is used by other agencies i.e. MPSC, MTS, B.Ed. CET, etc.</li> </ul>
2.4.2 Maintenance of Infrastructure	<ul style="list-style-type: none"> <li>• Infrastructure is maintained by supporting staff.</li> <li>• Maintenance of infrastructure and equipment modernization.</li> </ul>
2.4.3 Library as a Learning Resources	<ul style="list-style-type: none"> <li>• Library has an advisory committee which helps in development of library.</li> <li>• Library has 29,490 books. 8 academic Journals, 41 periodicals and magazines.</li> <li>• Library is partially automated and needs to be strengthened.</li> </ul>
2.4.4 ICT as Learning Resources	<ul style="list-style-type: none"> <li>• 40 computers, office and computer laboratory Computer-student ratio is 1:15.</li> <li>• A website is maintained.</li> <li>• Rs. 3,00,000/- is provided in annual budget for Computer maintenance.</li> </ul>
2.4.5 Other facilities	<ul style="list-style-type: none"> <li>• Indoor and outdoor facility is available for games.</li> <li>• College auditorium is available for recreational facility.</li> <li>• For wrestling and judo Vinaysheel Hanuman Shala is used.</li> </ul>
2.4.6 Best Practices in the Developments of Infrastructure and Learning resources	<ul style="list-style-type: none"> <li>• Intensive utilization of the campus from 7a.m. to 7p.m. by staggering/shift system.</li> </ul>

<b>2.5. STUDENT SUPPORT AND PROGRESSION</b>	
2.5.1. Student Progression	<ul style="list-style-type: none"> <li>• Pass percentage is relatively high compared to the university.</li> <li>• A sizable number of students proceed to different higher study programmes.</li> <li>• College pass percentage needs improvement.</li> </ul>
2.5.2 Student support	<ul style="list-style-type: none"> <li>• Institution publish prospectus.</li> <li>• 281 (more than 46%) students get scholarship /financial assistance.</li> <li>• Students need help in personality development such career planning, career counseling and soft skill training.</li> </ul>
2.5.3 Student activities:	<ul style="list-style-type: none"> <li>• Students have performed in some sports and games events at regional, and university levels.</li> <li>• The NSS, NCC and culture club assist the students in their extra-curricular activities.</li> <li>• Alumni Association is active and has some activities.</li> </ul>
2.5.4 Best Practices in student support and progression	<ul style="list-style-type: none"> <li>• Student council is active and participates in organizing Various activities.</li> </ul>
<b>2.6 GOVERNANCE AND LEADERSHIP</b>	
2.6.1 Institutional Vision and Leadership	<ul style="list-style-type: none"> <li>• Principal is the key person to provide leadership for the realization of vision and mission.</li> <li>• Good coordination is evident among the management and different stakeholders.</li> </ul>
2.6.2 Organization Arrangements:	<ul style="list-style-type: none"> <li>• Decentralized organizational structure with designated committees.</li> <li>• The principal coordinates with various committees and monitors the academic and administrative activities.</li> <li>• Created welfare fund.</li> </ul>

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2.6.3 Strategy Development and Deployment	<ul style="list-style-type: none"> <li>• Institutional plans are implemented in a systematic manner.</li> <li>• IQAC supports Quality Assurance in the Institution.</li> </ul>
2.6.4. Human Resource Management	<ul style="list-style-type: none"> <li>• Self Appraisal system for teachers.</li> <li>• Faculty is encouraged to training programmes and seminars for their empowerment</li> </ul>
2.6.5. Financial management and resource mobilization	<ul style="list-style-type: none"> <li>• Grant-in-Aid is received from the state government</li> <li>• The accounts is maintained and audited.</li> </ul>
2.6.6. Best practices in Governance and Leadership	<ul style="list-style-type: none"> <li>• Budget allocation is made for all the activities.</li> <li>• The finance of the institution is automated.</li> </ul>
<b>2.7 INNOVATIVE PRACTICES:</b>	
2.7.1 Internal Quality Assurance system	<ul style="list-style-type: none"> <li>• IQAC setup after accreditation is active.</li> </ul>
2.7.2 Inclusive practices	<ul style="list-style-type: none"> <li>• College concerns for differently abled students.</li> <li>• Facilities for the upliftment of SC/ST and OBC students are good.</li> </ul>
2.7.3. Stakeholder relationship	<ul style="list-style-type: none"> <li>• Regular interaction with the stake holders.</li> </ul>

**SECTION-III: OVERALL ANALYSIS**

3.1 Institutional Strengths	<ul style="list-style-type: none"> <li>• Facilities optimally/intensively utilized by staggering shifts (from almost 7a.m. to 7p.m.)</li> <li>• Good coordination reflects among the management and staff.</li> <li>• Physical education discipline is vibrant.</li> </ul>
3.2 Institutional Weakness	<ul style="list-style-type: none"> <li>• Infrastructure maintenance to be augmented.</li> <li>• Sufficient modern teaching aids are not evident.</li> <li>• Most of the departments have clock hourly basis faculties.</li> </ul>
3.3 Institutional Opportunities	<ul style="list-style-type: none"> <li>• Opportunity to enhance the staff by approximately incentivizing and augmenting facilities.</li> <li>• Opportunity for offering a range of career focus short-term certificate/diploma programmes availing UGC support, opportunity for better industry linkages.</li> <li>• Scope for easing pressure on the use of physical infrastructure by bifurcating the junior college.</li> </ul>
3.4 Institutional Challenges	<ul style="list-style-type: none"> <li>• Potential for new PG courses exists.</li> <li>• Challenge of institutional/procedural bottleneck, a characteristic of affiliating system (particularly for curricular innovations).</li> <li>• Declining attraction for basic sciences posing difficulties in attracting adequate number of students.</li> </ul>

**SECTION-IV: RECOMMENDATIONS FOR QUALITY ENHANCEMENT OF THE INSTITUTION**

- Backlog of teaching and non-teaching positions needs to be filled up against SC/ST/OBC.
- Modernization of classrooms, furniture, laboratories and wash rooms.
- Separate rest room and wash rooms to be provided for women staff.
- More of add-on certificate/diploma programmes with career focus, availing UGC support and industry tie-ups to be offered.
- ICT thrust in teaching-learning to be strengthened. Internet access in library be enhanced.
- Student support services (establish career guidance cell, placement services and soft-skill development).
- Library should procure more reference and text-books and made available for students use.
- Space/time constraint on the use of infrastructure and learning facilities and environment be eased by exploring the feasibility of bifurcating the junior college to a separate campus.
- Budgetary mechanism be made more systematic with specified budgetary allocations for various departments/items of expenditure.
- Management should think of providing transport facilities to attract more students.

**Signature of the Peer Members**

Name and Designation	Signature with date
Prof. S.D. Mishra Chairman	S.D. Mishra 16/2/2010
Dr. R.G. Sonkawade Member Co-ordinator	R. Sonkawade 16/2/2010
Dr. T.L. Shantha Member	TL Shantha 16/2/2010 (T.L. SHANTHA)

Place: Akola

Date: 16<sup>th</sup> February, 2010



**Annexure VIII : LIST OF PUBLICATIONS OF FACULTY MEMBERS**

**1. Dr. Vijay D. Nanoty (Principal)**

**Department: Microbiology**

Sr No	Title of the Research paper	Name of the Journals, Issue, Volume Number	Year of Publication
1	Biodegradation by proteolytic bacteria: an attractive alternative for biological waste treatment	Nature Environment and Pollution Technology. Vol. 9,No.4	2010
2	Study of Biofertilizers in combination with a chemical fertilizers	Journal of Microbial World, Vol. 12 No.2	2010
3	A comparative study of Microbial load in government, private and charitable hospitals in Akola city	Nature Environment and pollution technology; 11 (2): 329-330; 2012	2012
4	Determination of Susceptibility patterns in <i>Pseudomonas aeruginosa</i> related with nosocomial infection	Microb. World; 14 (1): 39-43; 2012	2012
5	Studies on Biosorption Process for Removing Heavy Metals from Aqueous Effluent by A Bacterial Extracellular Polymeric Substance	Indian Journal Of Applied Research; 4 (3): 17-19;2014 ISSN-2249-555X	2014
6	Biosorption of heavy metals from aqueous solution using bacterial EPS	International journal of life science 2014,vol-2(4),pp373-377	2014

**2. Dr Umesh K. Bhalekar(Asso. Prof and Head)Department:Microbiology**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Studies on proteolytic activity of soil bacterial isolates in various proteinaceous substrates.	Journal of Microbial World, 2010, Vol. 12 No.2,pp 133-140	2010
2	Determination of Susceptibility patterns in <i>Pseudomonas aeruginosa</i> related with nosocomial infection	Microb. World; 14 (1): 39-43; 2012	2012
3	Assay and characterisation of extracellular lipases comprising the discrete optimisation of lipolytic bacterial isolated from oil spilled soil.	Journal of Microbial World 2013,vol 13(2) pp 47-60	2013
4	Studies on Biosorption Process for Removing Heavy Metals from Aqueous Effluent by A Bacterial Extracellular Polymeric Substance	Indian Journal of Applied Research; 4 (3): 17-19;2014 ISSN-2249-555X Impact factors: 0.8215	2014
5	Biosorption of heavy metals from aqueous solution using bacterial EPS	International journal of life science 2014,vol-2(4),pp373-377	2014

**3.Dr Yusuf A. Ali (Asso. Prof)\***

**Department: Microbiology**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Studies on proteolytic activity of soil bacterial isolates in	Journal of Microbial World, 2010, Vol. 12	2010

	various proteinaceous substrates.	No.2,pp 133-140	
2	Studies on seasonal variation of incidence of Typhoid and Paratyphoid fever in Akola City	Nature Environment and pollution technology; 11 (4): 701-703; 2012	2012
3	Status and distribution of MECA gene in hospitalized patient's MRSA isolates	Bioscience Discovery,3(1): 52-57,Jan.2012	2012
4	Drug resistance pattern of Salmonella Typhi and Salmonella paratyphi from Akola	Thematics journal Microbiology Vol. 2 (1) 13-15;2013	2013

**4. Dr S.M. Padhye (Asso. Prof and Head) Department: Mathematics**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	On the equivalence of several definition of almost periodic function on locally compact groups	Global Journal of Mathematical science: Theory and Practical ISSN:0974-3200 Vol2,No3pp 143-149	2010
2	Characterizations of Collectively Compact sets of Operators on Banach Algebra of Almost Periodic Functions	International Journal of Mathematics Research ISSN: 976-5840 Vol-3No-3 pp231-238	2011
3	Limit Point Case and Limit Circle case for Sturm-Liouville Differential operator at a singular point	Global journal of computational Science and Mathematics ISSN: 248-9908 Vol2 No.1 pp 17-22	2012
4	Perturbation results of spectrum of sturm-Liouville Differential operators	International Journal of Mathematical Sciences Technology and Humanities 87(2013)973-977.	2013
5	On uniform continuity and compactness in pseudo metric	International Journal of Innovative Research in	2013

	spaces	Science, Engineering and Technology Vol2, Issue 8 pp 4014-	
6	Camparison theorem for limit points case and limit circle case of singular Sturm Liouville differential operators	Journal of Indian Mathematical society ISSN:0019-5839 Vol-80/3-4pp349-355	2013
7	Perturbation results of Limit Point Case and Limit circle case of of sturm-Liouville Differential operators	International journal of Innovative Research in Science, Engg. And Technology ISSN: 2319-8753 Vol 2,7,pp2876-	2013
8	On uniform continous uniformity on a Topological space	The international journal of Engineering and Science(IJES) ISSN:2319-1813	2014

**5. S.W.Bhaware (Asst. Prof)**

**Department: Mathematics**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Test particle motion in the feild of (t/z)type plane gravitational wave	Journal of Vectorial Relativity,5(2010), 2,78-81	2010
2	Titled Plane symmetric bulk viscous cosmological model with varying $\Lambda$ -term	Journal of Vectorial Relativity, 5(2010),3,43-53	2010
3	Plane wave solutions of Weakened field equations in a generalized space-time	Pre Space Time Journal/ Sept.2011/ Vol-2, Issue-9/ pp.1369-1376.	2011
4	Proposed Co-ordinate system in which $g_{\alpha\alpha} = 0$ and the line element for plane gravitational waves of type $Z = \frac{t_1-t_2+t_3}{\sqrt{3}z}$	Pre Space Time Journal/ Jan.2012/ Vol-3, Issue-1/ pp.67-74.	2012
5	The (t/z) type Plane Wave Solutions of the Field Equations of Bonner and Schrodinger Non-Symmetric Unified Field Theory.	Prespacetime Journal/ march-2012/vol.3/issue -5/pp.463-473.	2012
6	Plane gravitational wave in generalised Peres space-time	Pre space time journal Quantum dream Vol5 /7 pp 700-706	2014

**6. Ku. Sujata B. Tadam (Asst. Prof) Department: Mathematics**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	On uniform continuity and compactness in pseudo metric spaces	Intern. Jour. of Innovative Research in Science, Engineering and Technology Vol2/8	2013
2	On uniform continuous uniformity on a Topological space	The international journal of Engineering and Science(IJES) ISSN: 2319-1813 Vol3/7	2014

**7. Dr. Pradip P.Deohate (Asst. Prof & Head) Department: Chemistry**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Green synthesis of quinoxaline and substituted quinoxaline.	International J. Chem. Sci., 9(4), 1768, 2011.	2011
2	Substituted [1,3,4]-oxadiazole, [1,3,4]-thiadiazole and [1,2,4]-triazole; synthesis, characterization and antimicrobial study.	J. Indian Chem. Soc., 89, 253, 2012.	2012
3	Synthesis and biological evaluation of pharmacologically important [1,2,4] dithiazolidines.	International J. Chem. Sci., 10(2), 895, 2012.	2012.
4	Synthesis, structural study and biological activity of bridgehead nitrogen containing triazolo-thiadiazinone heterocycles.	J. Der Pharma Chemica, 4(5), 2042 (2012).	2012.
5	Synthesis, structural study and biological evaluation of pharmacologically important substituted bis-benzothiazole systems.	J. Der Pharma Chemica, 4(5), 2107 (2012).	2012.
6	Synthesis, characterization and antimicrobial potential study of substituted bis[1,2,4]-dithiazolidine derivatives.	J. Der Pharma Chemica, 4(6), 2368 (2012).	2012.
7	Synthesis, structural study and antimicrobial screening of bridgehead	J. Der Pharma Chemica, 4(6), 2434	2012.

	nitrogen containing 1,8-bis thiadiazino-triazolyl-octanes.	(2012).	
8	Substituted [1,2,4,5]-dithiadiazines and [1,3,4]-thiadiazolidines; synthesis, characterization and antimicrobial study.	J. Indian Chem. Soc., 89, 1705 (2012).	2012
9	Synthesis, structural study and antimicrobial screening of substituted-[1,2,3,4]-tetrazines.	Indian J. Hetero. Chem., 22(2), 151 (2012).	2012
10	Microwave assisted synthesis, characterization and antimicrobial study of substituted benzo-(5,6-e)-[1,3]-diazepine-4,7-dione derivatives.	J. Chem. Sci. Trans., 2(1), 65 (2013).	2013
11	The non-aqueous potentiometric determination of pharmaceutically potent drug aspirin.	American J. Pharmtech Res., 3(1), 459 (2013).	2013
12	Synthesis, structural study and antimicrobial screening of substituted bis-benzothiazole derivatives.	J. Chem. Sci. Trans., 2(2), 473 (2013).	2013
13	Synthesis, structural study and biological activity of bridgehead nitrogen containing triazolo-thiadiazine derivatives.	J. Chem. Sci. Trans., 2(2), 556 (2013).	2013
14	Potentiometric determination of pharmaceutically important nimesulide in non-aqueous medium.	J. Chem. Sci. Trans., 2(S1), S234 (2013).	2013
15	Microwave assisted cyclization of acridinyl thiourea into dithiazolidines and their antimicrobial study.	J. Der PharmaChemica, 5(2), 301 (2013).	2013
16	Synthesis of some new substituted benzothiazoles using aminoacridine.	Indian J. Hetero. Chem., 22(1), 279	2013
17	The determination of pharmaceutically important ibuprofen by non-aqueous potentiometric titration method.	J. Indian Chem. Soc., 90, 1379 (2013).	2013
18	Synthesis, antituberculosis and antimicrobial study of some new amino acridine linked pyrazoles.	Indian J. Chem., 52B, 1531 (2013).	2013
19	Synthesis and antimicrobial screening of novel bis-triazolo-thiadiazoles	American J. Pharmtech Res., 4(1),	2014

	containing bridgehead nitrogen.	847 (2014).	
20	The simultaneous non-aqueous potentiometric determination of binary mixture of pharmaceutically potent drugs.	J. Indian Chem. Soc., 91, (2014).	2014
21	The convenient microwave-assisted synthesis, characterization and structural study of substituted bis-[1,2,4]-dithiazolidines.	<i>J. Indian Chem. Soc.</i> , <b>91</b> , 1361 (2014).	2014
22	Microwave assisted synthesis of pyrazole substituted acridines and their antimicrobial study.	Indian J. Hetero. Chem., 23(3), 253 (2014).	2014
23	Microwave assisted synthesis and biological evaluation of some novel pyrimidine linked pyrazoles.	<i>International J. Chem. &amp; Phy. Sci.</i> , <b>Sp-97</b> , ----- (2015).	2015
24	Extraction and identification of phytoconstituents from leaves of some phyllanthus plants by GCMS.		2015
25	Synthesis of some acridin-9-yl-aryl thiourea and antimicrobial study.		2015

**8. Dr Poonam T. Agrawal (Asst. Prof)****Department: Chemistry**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Synthesis of 2-phenylimino-3-aryl-4-S-benzyl-6-hepta-O-benzoyl- $\beta$ -D lactosylimino-2,3-dihydro-1,3,5-thiadiazine hydrochlorides.	J. Indian Chem. Soc., 87, 1259, 2010.	2010.
2	Synthesis and antimicrobial activity of 1-hepta-O-benzoyl- $\beta$ -D-lactosyl-5-aryl-2-S-benzyl-1,2,4 isodithio-biurets.	J. Indian Chem. Soc., 87, 1395, 2010.	2010.
3	Synthesis and antimicrobial activity of some new-1,2,4-dithiazolidine hydrochlorides.	International J. Chem. Sci., 8(2), 969, 2010.	2010
4	Synthesis of New N-Lactosylated Thiocarbamates.	International J. Chem. Sci., 8(4), 2413, 2010.	2010
5	Synthesis and antimicrobial activity of some new N-lactosylated-1,2,4-dithiazolidine (hydrochlorides).	J. Indian Chem. Soc., 88, 1759, 2011.	2011

6	Synthesis of new 1-hepta-O-benzoyl- $\beta$ -D-lactosyl-3-aryl thiocarbamides.	J. Current Chem. & Pharm. Sci., 2(3), 157 (2012).	2012
7	Synthesis of 1-hepta-O-benzoyl- $\beta$ -D-lactosyl-5-substituted-2-S-Benzyl-2-isothiobiurets.	International J. Chem. Sci., 10(3), 1719 (2012).	2012
8	Synthesis of 1-(4-aryl-3-arylimino-5-immino-1,2,4-thiadialidine)-phenyl amino methanamides.	International J. Chem. Sci., 10(3), 1459 (2012).	2012
9	Synthesis of 3-substituted benzothiazolyl-1-phenylamino methanamides.	Rasayan J. Chem., 5(2), 145 (2012).	2012
10	Microwave: a new green synthesis technique.	J. Sci. Reviews & Chem. Comm., 2(3), 206 (2012).	2012
11	Isothiobiurets as an antibacterial and antifungal compounds.	International J. Chem. Sci., 10(2), 889 (2012).	2012
12	3-substituted benzothiazolyl-1-phenyl amino methenamides: as an antimicrobial compounds.	International J. Chem. Sci., 10(4), 1913 (2012).	2012
13	A facile synthesis and studies of 1-hepta-O-benzoyl- $\beta$ -D-lactosyl-O-aryl thiocarbamates.	International J. Chemtech Appl., 2(1), 173 (2013).	2013
14	Increasing efficiency of solar cooker by using CO <sub>2</sub> gas	Int. J. of Scientific and Engineering research , Vol 4 (6), June 2013 89-92,ISSN 2229-5518	2013

#### 9. Pravin R. Kawle (Asst. Prof)

Department: Chemistry

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Synthesis and biological evaluation of pharmacologically important [1,2, 4] dithiazolidines.	International J. Chem. Sci., 10(2), 895, 2012.	2012
2	Microwave assisted cyclization of acridinyl thiourea into dithiazolidines and their antimicrobial study.	J. Der Pharma Chemica, 5(2), 301 (2013).	2012
3	Synthesis of some new substituted benzothiazoles using	Indian J. Hetero. Chem., 22(1), 279	2013



	aminoacridine.	(2013).	
4	Synthesis, antituberculosis and antimicrobial study of some new amino acridine linked pyrazoles.	Indian J. Chem., 52B, 1531 (2013).	2013
5	Microwave assisted synthesis of pyrazole substituted acridines and their antimicrobial study.	Indian J. Hetero. Chem., 23(3), 253 (2014).	2014
6	Synthesis of some acridin-9-yl-aryl thiourea and antimicrobial study.	<i>International J. Chem. &amp; Phy. Sci.</i> , <b>Sp-97</b> , (2015).	2015

**10. Dr Kavita Heda (Asst. Prof)****Department: Chemistry**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Biological evolution of some newly synthesized thiadiazines	<i>International J. Chem. &amp; Phy. Sci.</i> , <b>Sp-97</b> , (2015).	2015

**11. Dr. Sushil M. Nagrale (Asst. Prof & Head)****Department: Zoology**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	A study of reproductive biology of mycophagous thrips <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaethripidae)	The Ecotech: An International Biannual journal of Ecology and Environmental Science. Vol 4(1):1-4, (ISSN 0974-9063)	2012
2	Life history of mycophgous thrips <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaethripidae)	Science Research Reporter 2(3): 256-259, Oct.2012 (ISSN:2249-2321)	2012
3	Observation on mating behaviour in mycophgous thrips <i>Elaphrothrips sp</i> (Thysanoptera: Phlaethripidae)	Indian Stream Research Journal, (Special Issue:11 Jan 2013) (ISSN: 2230-7850)	2013

## 12. Dr. Archana A. Amaley (Asst. Prof )

Department: Zoology

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	<i>Nephila pilipes</i> : An excellent architect	Trends in Life sciences (India) 25(2),55-59 ISSN0970-2504	2010
2	Role of spider in agro ecosystem	“The Ecosphere”, International Journal of Ecological Sciences, Vol.2, No.1, 2011	2011
3	Origin and properties of dragline silk of <i>Nephila pilipes</i>	Journal of Biological and Physical Sciences. November 2012, Vol. (IV), 45-47, (ISSN: 2319-636X).	2012
4	Study of silk glands and silk secreting apparatus in <i>Nephila pilipes</i>	Indian Journal of Arachnology Vol.1 No.1 pp156-162	2012
5	Biochemical analysis of major ampullate silk of <i>Nephila pilipes</i> with FTIR spectroscopy	Asiatic Journal of Biotechnology Resources; SPL 11; Jan.2014.	2014
6	Antimicrobial nature of dragline silk of <i>Nephila pilipes</i>	Indian Journal of Arachnology Vol.3 No.1 pp8-11	2014

## 13. Dr. Sudhir R. Kohchale (Asst. Prof)

Department: Zoology

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Therapeutic use of animals and animal derived parts in Gadchiroli district	The Ecotech Vol 2(2),126-127 Sept 2010	2010
2	Diet and ecosystem role of the indian grey monghoose, <i>Herpestes edwardsii</i> in forest of Chandrapur district	The Ecotech Vol 2(2),249-250 Sept 2010	2010
3	Antenatal Care and Maternal Mortality in Akola District	“The Ecosphere”, International Journal of Ecological Sciences, Vol.2, No.1, 2011	2011
4	Toxicity of leaf extract of <i>Jatropha curcas</i> and <i>Melia azedarach</i> , to castor semi	The Ecotech 4(2)13-174 2012	2012

	looper, <i>Archae janata</i> (NOCTUIDAE:LEPIDOPTERA)		
5	Incidence of root knot nematodes on brinjal and tomato plants in Vidarbha region of Maharashtra	The Ecotech 4(2)13-174 2012	2012
6	Serum Biochemical Evaluation of Sickle Cell Subjects in Gadchiroli District of Maharashtra	Environment & Ecology 31 (4) : 1643—1645, Oct—Dec 2013. environmentandecology.com ISSN 0970-0420	2013
7	Effect of <i>Tinospora cordifolia</i> on Blood Glucose Level of Albino Wistar	International Journal of Pharmaceutical Sciences Review and Research ISSN 0976-044X <b>Impact factor 2.191.</b>	2014
8	Serum protein analysis of sickle cell subjects from Gadchiroli District (Maharashtra)	Ecobiologia- An International Biannual journal of ecology and biological Sciences ISSN : 2320-3733	2014

**14. Pramod M. Khadse (Asst. Prof)****Department: Botany**

Sr. No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Phytochemical Screening of some medicinal plants seeds used in diabetes	International J. Phytochem.Sci., In communication. 2014.	2014-15
2	Qualitative phytochemical screening of seeds of some Medicinal plants	International Journal of Pharmacy and BioScience. Impact factor: 2.093	2014-15

**15. R. D. Chaudhari (Asst. Prof)****Department: Electronics**

Sr No	Title of the Research paper	Name of the Journals, Issue, Volume Number.	Year of Publication
1	Artificial intelligence play an important role using various sensors for identification of person iris	International journal of Basic and applied Research, sp,issue (95-97) NCRTP-2012	2012

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**16. P.P. Gedam (Asst. Prof)**

**Department: Physics**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Linear optical studies of L-arginine surface modifies CuO Nanoparticles	Journal of Advances in applied Science and Technology. Special issue: Vol-1/issue-2/page 153-155	2014

**17.Mangesh R Ubale (Librarian)**

<b>Sr. No</b>	<b>Title of the Research paper</b>	<b>Name of the Journals, Issue, Volume Number.</b>	<b>Year of Publication</b>
1	Bal Gangadhar Tilak Social Thought	Aadhar Publication. Oct 2012 ISSN No.2278-9308	2012

**Annexure IX : DETAILS OF COMPUTER CONFIGURATION**

CPU	BOARD	RAM	HDD	D V D	SCREEN	OP.SYS.	OTHER PERIPHERALS	REMARK
OFFICE total -07								
Pentium 4,2.8 GHz	Intel 865, G35 chipset	1GB	100GB	D V D	17" LCD samsung	XP	Printer Epson LK1150-2	Assembled Desktop
DC 2.8 GHz	G41 Chipset ,G945	2GB	250GB	D V D	18.5"LCD philips	XP	All in one laser Printer3015. HP,All in one inkjet F380 printer-HP,HP laser 1020,HP Inkjet 2520	Assembled Desktop
DC 2.10G Hz,2. 93GHz	H61 Chipset	2GB,1 GB	200GB ,500G B	D V D	18.5"LCD DELL	XP	Canon laser Printer 2900,Laser printer 1020HP,UPS	Assembled Desktop
C2D 2.93 GHz	G31 chipset	1GB	80GB	D V D	18.5"LCD	XP	Scanner110,Laser Printer canon 2900	Assembled Desktop
C2D 2.10 GHz	G45 chipset	2GB	250GB	yes	15"LCD DELL	XP		DELL Laptop
IQAC OFFICE-01								
Dual core i3,2.9 GHz, 4 <sup>th</sup> generation	H81 chipset	4GB	500GB	Y E S	20"LED DELL	Window-7	All in one laser printer M1136 HP,smps	All in one Desktop DELL
Computer department(22)								

Intel i- 7,3.4 GHz	Intel Motherboard H61 chipset	8GB DDR3	500GB	D V D	18.5" LED DELL	XP	Laser printer=01 HP 1000 WEBCAM	DELL Server
Intel i-3,2.5 GHz	Intel Motherboard	4GB DDR3	500GB		18.5" LED DELL,LG(15)	XP	DMPs=05 LX -300 EPSON	DELL Desktops Inspiron 620

	ard H6 1 chi pse t							
Intel core i-5	Int el Mo the rbo ard H M 65	8GB DDR3	500GB	D V D	15"LED	WINDOW -7	With 1GB Graphics card Scanner UMAX	SONY Vio laptop
Penti um 4,2.8 GHz	Int	2GB DDR2	80GB	D V D	17"LCD SQUARE	XP	UPS	Assemble d Desktop

el Mo the rbo ard								
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Information Technology Department (15)

Intel Xeon 3.0 GHz	3200/3210 chipset	4GB ECE	250GB	D V D R O M	18.5" TFT LCD-HP	Win Ser 2008(Lic.)	LASER Printer Canon 2900	Server HP
N Computing L130 Thin Clients					18.5" TFT LCD-LG	XP		Terminals LG

Bio Informatics (11)

Intel Core i3,2.93GHz	H55	4GB DDR3	500GB	D V D	18.5" LED HP	Win Ser 2008(Lic.)	LASER Printer Canon 2900,UPS	Server HP SMPS
N					18.5" LCD	XP		Terminals



Computing L130 Thin Clients					LG			LG
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## Microbiology Department(04)

Intel i3,2.93 GHz	Intel H55 Chipset	2GB DDR3	500GB	Yes	22" TFT LED Samsang	XP	Laser Print. A10 Canon 4412, UPS	Assembled Desktop
Dual Core, 2.5 GHz	Intel G41c/s	2GB	320GB	Yes	18.5" TFT LCD Samsang	Win 7	Laser Print. Canon UPS	Assembled Desktop
Intel i3,2.2		3GB DDR3	320GB	Yes	15.6" LCD Dell	Win 7		Laptop DELL

7GHz								N5010
Intel i3,2.20GHz		2GB DDR3	750GB	Yes	15.6" LED Dell	Win 7	With 2GB Graphics card	Laptop ASUS K535

Electronics Department (02)

Intel Core i3,3.10GHz	H61 c/s	4GB DDR3	500GB	Yes	18" LED Samsang	XP	Laser Printer All in one, Canon MF 4412 SMPS	Desktop Assembled
Intel Pentium R,2.6GHz	H61 c/s	2GB,DDR3	500GB	Yes	18" LED DELL	XP	Injet Printer HP 3745	Desktop Assembled

Chemistry Department -06

Intel Core i3,3.10GHz	H61 c/s	4GB DDR3	500GB DDR3	Yes	18" LED Samsang	XP	Laser Printer All in one, Canon MF 4412 SMPS	Desktop Assembled
Intel C2D, 2.93GHz	Intel G41 chipset	2GB DDR3	80GB DDR3	yes	18.5" TFT LCD LG	XP	Laser printer canon 2900,Scanner canon UPS	Desktop Assembled
Pentium 4,2.8GHz	Intel 865, G35 chipset	1GB	100GB	DVD	17" LCD	XP		Assembled Desktop
DC,1.8GHz	HM76 c/s	4GB	500GB	yes	15.6" LED dell	Window-8		Laptop DELL
Intel core i3	HM65	4GB	300GB	Yes	15.6" LED SONY	Window-7		Laptop Sony Vio
i5, 1.70GHz, III	HM77	4GB	500GB, 32GB SSD	Yes	14" LED DELL	Window-8		Laptop DELL (ultrabook)

gene.								
Biochemistry Department-01								
Intel i3	H61 c/s	2GB	500GB DDR3	Yes	22" TFT LG	XP	Laser printer canon 2900,UPS	Assembled Desktop
Department of Physical Education- 03								
Intel i3	H55 c/s	4GB	500GB	Yes	18.5" LED LG	XP	Laser printer canon 2900,UPS	Assembled Desktop
Intel i3,2.4 GHz	HM55 c/s	2GB	200GB	Yes	15.6" LED SONY	XP	Graphics card	Laptop SONY Vio
Intel Pentium R,1.93 GHz	HM76	4GB	400GB	Yes	15.6" LED DELL	Window-7		Laptop DELL inspiron 15
Zoology Department-02								
Intel Core i3,3.10GHz	H61 c/s	4GB DDR3	500GB	Yes	18" LED Samsang	XP	Laser Printer All in one, Canon MF 4412 SMPS,laser pri.canon 2900	Desktop Assembled
Pentium 4,2.8 GHz	Intel 865, G35 chipset	1GB	100GB	DVD	17" CRT	XP		Assembled Desktop
Botany Department-02								
Intel Core i3,3.10GHz	H61 c/s	4GB DDR3	500GB	Yes	18" LED Samsang	XP	Laser Printer All in one, Canon MF 4412 SMPS	Desktop Assembled
Pentium 4,2.8 GHz	Intel 865, chipset	1GB	100GB	DVD	17" CRT	XP		Assembled Desktop
Mathematics Department-02								

Pentium 4,2.8 GHz	Intel 865, chipset	1GB	320GB	D V D	18.5" TFT LED	XP	Laser all in one Canon 4320,Laser canon 2900	Assembled Desktop
Intel i3,2.27 GHz	HM57	3GB	320GB	Yes	15.6" LED Dell	Window-8		Laptop DELL

Physics Department-01

Intel i5,3.10GHz	H61 c/s	2GB	500GB	Yes	18.5" LED	Window-7	Laser jet HP,UPS	Assembled Desktop
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Library-08

Intel I3,3.07GHz	H55, chipsets	4GB,D DR3,,	1TB	Yes	22", 21" TFT LCD,LED samsung, LG,	Win SERVER 2003(lic.), XP	Laser printer canon 2900,Scanner canon,ups	Server,Ass embled Desktop
Intel I3,3.10GHz	H61 chipsets	2GB,D DR3,,	500GB	yes	22" LED (02)Samsang, 18.5" LED(01) Sam.	XP		Assembled Desktop
Intel P4,2.93GHz	G31 chipset	1GB DDR2	250GB	Yes	22", LED samsung,	XP	UPS	Assembled Desktop
N Computing Thin Client Terminal					18.5" TFT LCD	XP		Thin Client Terminal

**Annexure X : AUDITED STATEMENTS OF LAST TWO YEARS**

SHRI R.L.T. COLLEGE OF SCIENCE, AKOLA			
RECEIPTS AND PAYMENTS			
2012-13			
		Senior College	
PARTICULAR	AMOUNT	PARTICULAR	AMOUNT
Salary Grant	29563125	Teaching Staff Salary	17595281
Tuition Fee	434148	Non-Teaching Staff Salary	11994335
Laboratory Fee	285686	Books	5517
Library Fee	117500	Reading Room Exp.	15614
College Exam Fee	54062	Scientific Apparatus	139236
College Magazine	38750	Electric Goods	58804
Games Sports/ Other	50625	Building Repairs	210602
Extra Cultural Activity	38750	Furniture	72229
Other Receipt	72812	Furniture Repair	16300
Breakeage	14789	Term Fee Exp.	127608
Cost of Lost Books	120	Electric Repair	18708
Misc Receipt	5288	E.C. Act	18533
Decl. Of Cast Conce.	48600	Contingency Exp.	693507.8
G.O.I. Fee	63784.1	U.G.C. Development	230180
P.T. Conce.	20634	U.G.C. CLT Expenses	120041
U.G.C. All Grants for	935821	Current Lab. Exp.	166706
Certificate fee	2825	General Insurance	13955
C.L.T. Fee	131619	Fee Refund	1863
Investment	700000	College Magazine	37600
University Level Seminar	5000	UGC Ladies Hostel	2798629
		Building Construction	957153.74
		Env. Expenses	14529
		Journals	2500
		Botanical Garden	25680
		Investment	1000000
		UGC Merged Scheme	88900
		Auditorium Hall Repair	1971490
		UGC Level Seminar	7000
		College Examination Expenses	6950
		Educationa Tour	6710
		Guest Lectur	4000
		UGC Add. Assistant	7037
		R.L.T Website	23500
		U.G.C. Bulding Grant	400000
		New Compound Wall	417513
		Interest	21829.69
		Paid to UGC	60940.00
		Interest Received -	39110.31
Statement A	32583938.1	Statement A	39290041.23

D:\RLT\KYPati\Receipt\_Paymen



## RECEIPTS AND PAYMENTS

2012-13

PARTICULAR	AMOUNT	PARTICULAR	AMOUNT
G.P. Fund	3276554	G P. Fund	3276554
Income Tax	1943693	IncomeTax	1943693
Prof. Tax	163700	Prof. Tax	167516
LIC	1135402	LIC	1139245
S.E. Co-Op. Society	2676400	S.E. Co-Op. Society	2676400
Co. Op. Store	192800	Co. Op. Store	192800
Employee's Bank Loan	84210	Employee's Bank Loan	84210
Group Insurance	64223	Group Insurance	73563
University Fee	653585	University fee	613793
Advance A/c	1376944	Advance A/c	2449849
Junior College	814864	Junior College	351054
Jr. College Non Grant	1800000	R.D.S.	2702
B.G. Society	3998125.74	Stale Cheque	8106
Union fee	8025	Union fee	8025
University Exam. Exp. Adv.	172400	University Exam. Exp. Adv.	247175
"- Practical Exam adv.	27400	"- Practical Exam	11690
Govt Scholarship	2387743	Govt Scholarship	2493824.1
Books Deposit	990	Books Deposit	1756
Caution Money Deposit	25500	Computer Repair	6805
Prize	14447	Professional Fee	101047
Development fund	88500	Sr.Colleg Non Grant	496699
Sr.College Non Grant	401656	Computer Non Salary	14017
Prospectus	35000	Development fund	88500
I. Card	26550	Computer purchase	2950
C.P.F.	2864	Prospectus	35000
D.C.R.G	602874	I. Card	26550
Stale cheque	9600	Prize	14447
		Tender Deposit	20000
		Honorarium	158000
		D.C.R.G.	602874
		C.P.F.	2864
<b>Statement B</b>	<b>21984049.74</b>	<b>Statement B</b>	<b>17311708.10</b>
<b>Statement A</b>	<b>32583938.10</b>	<b>Statement A</b>	<b>39290041.23</b>
<b>A+B</b>	<b>54567987.84</b>	<b>A+B</b>	<b>56601749.33</b>
Opening Balance	37499.74	Closing Balance	1709448.25
<b>G. Total</b>	<b>58311197.58</b>	<b>G. Total</b>	<b>58311197.58</b>

As per our report of even date,  
for Prashant Lohiya & Associates,  
Chartered Accountants

D:/RLTKYPatil/Receipts/Payment



*Dulant*

Principal

**Shri. R.L.T. College of Science, Akola.**  
**RECEIPTS AND PAYMENTS**  
**2013-14**

Senior College

PARTICULAR	AMOUNT	PARTICULAR	AMOUNT
Salary Grant	40651071.00	Teaching Staff Salary	26607167.00
Tuition fee	693570.00	Non Teaching Staff Salary	14020318.00
Laboratory Fee	487871.00	Book	7646.00
Library Fee	154000.00	Reading room Exp	23938.00
College Exam Fee	73500.00	Electrical Goods	709642.00
College Magazine	49000.00	Building Repairs	2373306.00
Game Sports / Other	181986.00	Furniture	1243464.00
Extra Cultural Activity	49000.00	Furniture Repair	22875.00
Misc. Receipt	8805.00	Term Fee Exp	121505.00
Breakeage	30615.00	Electric Repair	104582.00
Cost of Lost Books	557.00	E C Act	22938.00
Other Receipt	26636.00	Contingency Exp	891740.00
Decl. Of Cast Conce	271606.00	Book Birding	150.00
EBC Fee	9130.00	U G C CLT Expenses	146133.00
P T Conce	34760.00	Current Lab Exp.	347662.00
U G C All Grants for	537000.00	Fee Refund	7690.00
C L T Fee	113400.00	College Magzine	40000.00
Investment	1000000.00	UGC Ladies Hostel	2737494.00
Intrest	44119.00	Building Construction	8014046.00
Certificate Fee	600.00	Env. Expenses	11579.00
Enviornmental Science fee	11625.00	Botanical Garden	43320.00
Other fee	8240.00	UGC Grant Ret.	130714.00
Pay Recovery	13528.00	Auditorium Hall Repair	1862638.00
Scrap material	165820.00	UGC MRP Exp.	375463.00
		College Examination	6866.00
		Guest Lectur	1100.00
		Machine Repair	5500.00
		R L T Website	18000.00
		Building Rent	100000.00
		Interest	12996.00
		N.S.S.	5000.00
		D.O.C.	271606.00
<b>Statement A</b>	<b>44616439.00</b>	<b>Statement A</b>	<b>60287078.00</b>



**RECEIPTS AND PAYMENTS**  
**2013-14**

PARTICULAR	AMOUNT	PARTICULAR	AMOUNT
G. P. Fund	2841412.00	G. P. Fund	2841412.00
Income Tax	3357101.00	Income Tax	3357101.00
Prof Tax	162800.00	Prof Tax	162800.00
LIC	1229702.00	LIC	1229702.00
S.E. Co-op Society	2643100.00	S.E. Co-op Society	2643100.00
Employee's Bank Lone	99830.00	Employee's Bank Lone	98230.00
Group Insurance	38823.00	Group Insurance	38823.00
University Fee	1034760.00	University Fee	783203.00
Advance A/c	7034608.00	Advance A/c	2791699.00
Junior College	287214.00	Junior College	832010.00
Jr. College Non Grant	2900000.00	Jr. College Non Grant	700000.00
B. G. Society	10550000.00	Stale Cheque	450.00
Union fee	7665.00	Union fee	7665.00
University Exam Ezp. Adv.	311613.00	University Exam. Exp. Adv.	232140.00
Uni. Practical Exam adv.	100219.00	Uni. Practical Exam adv.	25351.00
Govt. Schoparship	3515845.00	Govt. Schoparship	3568679.00
Book Deposit	2755.00	Book Deposit	2555.00
Caution Money Deposit	28950.00	Computer Repair	70090.00
Prospectus	48450.00	Prospectus	48450.00
Development fund	107600.00	Development fund	107600.00
Sr. College Non Grant	72083.00	Sr. College Non Grant	75352.00
I. Card	32280.00	I. Card	32280.00
Co-op Store	272749.00	Co-op Store	272749.00
D.C.R.G.	567959.00	D.C.R.G.	567959.00
Tender Deposit	2000.00	Inauguration Exp.	90588.00
DCPS	1243499.00	DCPS	1243499.00
Tender form fee	200.00	Honorarium	40300.00
		Professional Fee ✓	1094034.00
Statement B	38493217.00	Statement B	22957821.00
Statement A	44616439.00	Statement A	60287078.00
A+B	83109656.00	A+B	83244899.00
Opening Balance	1709448.25	Closing Balance	1574205.25
G. Total	84819104.25	G. Total	84819104.25

P.K. Lohiya Partner M.No. 48469 Partner  
Chartered Accountants FRN 114659W  
28 JUL 2014



*Wankar*  
Principal  
R.L.T. College of Science  
Akola Lines, AKOLA (M. S.)