



The Berar General Education Society's
**Shri Radhakisan Laxminarayan Toshniwal
College of Science, Akola (M.S.)
(Shri R.L.T. College of Science)**

Recognized by Government of Maharashtra
Affiliated to Sant Gadge Baba Amravati University, Amravati
Re-accredited 'A' by NAAC, Bangalore With CGPA-3.12



**4th Cycle of
NAAC ASSESSMENT AND ACCREDITATION**

**CRITERION VII
INSTITUTIONAL VALUES AND BEST PRACTICES**

**Key Indicator – 7.2
OTHER BEST PRACTICES
OF THE INSTITUTION**



The Berar General Education Society's

**SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL
COLLEGE OF SCIENCE, AKOLA**

**Affiliated to
Sant Gadge Baba Amravati University, Amravati,
Maharashtra**

**NAAC Re-accredited with Grade "A"
(CGPA 3.12-Third Cycle)
Website: www.rltsc.edu.in**

7.2- BEST PRACTICES

**OTHER BEST PRACTICES
OF THE INSTITUTION**



OTHER BEST PRACTICES
OF THE INSTITUTION

Index

Other Best Practices of the Institution		
Sr. No	Contents	Page No.
	Declaration	3
1	Nursery of saplings grown from naturally occurring seedlings.	4
2	Blank Paper Bank - To Save the Paper to Save the Tree	7
3	Eco friendly Ganesha Idol Preparation	9
4	Nature reading through Mobile photography	11
5	Fitness Development Programme	14
6	Know Our Universe	17
7	To nurture the culture of environment consciousness not only among the students and faculty members but also in society.	20
8	Working with Unnat Bharat Abhiyan (UBA): A step towards sustainable development of village.	28
9	Green Chemistry: An Innovative Technology	38



The Berar General Education Society's Akola
SHRI RADHAKISAN LAXMINARAYAN TOSHNIWAL COLLEGE OF SCIENCE

Civil Lines, Akola. 444001 (Maharashtra)

Affiliated to Sant Gadge Baba Amravati University, Amravati

Re-accredited by NAAC with "A" Grade with CGPA 3.12

AISHE CODE: C-43124

E-mail: rltcollegeakola@gmail.com

Website: www.rltsc.edu.in

COLLEGE CODE: 210

Principal: Dr. Vijay D. Nanoty

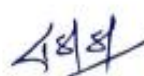
phone: 0724-2415480, 9822724504

Ref. No: RLT/IQAC/C-VII /7.2.2


Date: 20/10/2022

DECLARATION

This is to declare that, the information, data, photographic evidences, true copies of the supporting documents etc. furnished in this file of **7.2.2: Other Best Practices of the Institution** is checked and verified by IQAC, Shri R. L. T. College of Science, Akola and found to be correct.


(Dr. R. L. Rahatgaonkar)
IQAC Coordinator
Shri R L T College of Science, Akola




(Dr. V.D. Nanoty)
Principal & IQAC Chairman
Shri R L T College of Science, Akola

Best Practice - 1

Title of the Practice: Nursery of saplings grown from naturally occurring seedlings.

Goal: To conserve the seedlings and inculcate the habit of conservation among students.

The Context: Conservation and awareness for saving natural wealth is essential for future generation. By keeping this motto it is the best policy to grow the seedlings into saplings for nursery with the help of students. Every year seeds of different plants (Neem, Tecoma, Custard apple, Ficus etc.) germinate naturally below the parent trees. The newly developed seedlings die due to both natural and artificial causes. The natural causes include competition between the plants while artificial causes include weeding and many other human activities. To protect these seedlings, it is a good idea to prepare nursery by converting them into the saplings.

The Practice:

- Seedlings of different plants like Neem, Tecoma, Custard apple, Ficus etc. were collected from the college campus and nearby area.
- These seedlings were planted into the nursery plastic bags containing soil and manure.
- Proper care was taken up to seedlings converted into saplings.
- Saplings were distributed among students and college employees for plantation.
- The saplings were provided to N.S.S. and N.C.C. departments of college for plantation programs in and outside the college campus.
- Instead of flowers these saplings were used for welcoming of guests in various programmes and college activities, felicitation of students, which promotes the conservation of Green Earth.

Evidence of Success: About 400 saplings were developed in the nursery. Numbers of them are successfully planted in different parts of the city and adopted village. The saplings distributed to students and guests are successfully grown to their houses.

In this activity, the students of 'Holy Basil' Club and other students actively participated. Thus, this activity proved very useful to inculcate awareness about natural resources, the self confidence and self-sufficiency among the students.

Resources Required: Naturally germinated seedlings, nursery bags, soil, manure etc.

Problems Encountered: No.

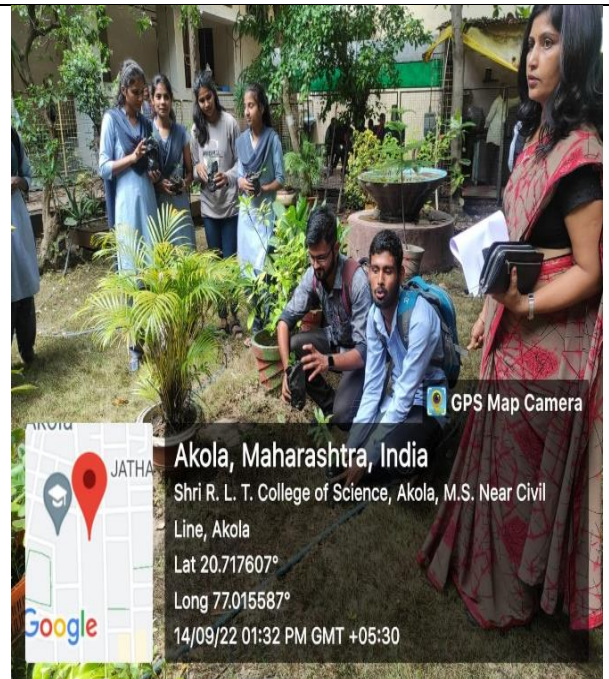
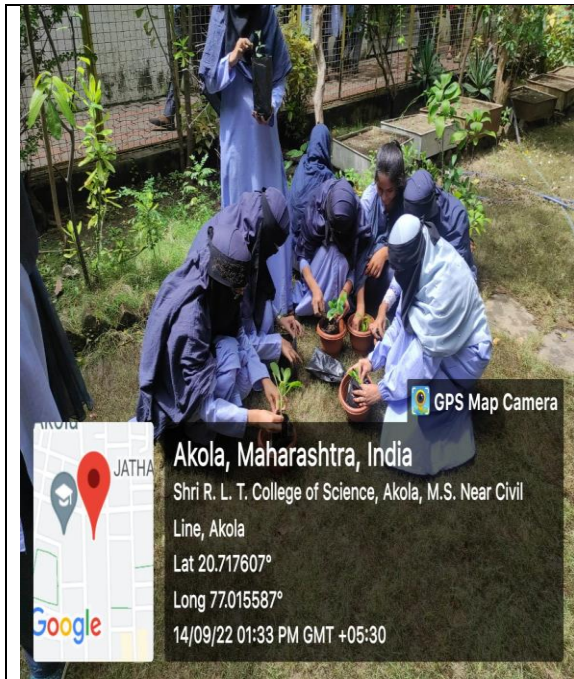
Nursery of saplings grown from naturally occurring seedlings.



Inauguration of 'Botanical Nursery' at the hands of Dr. Ajayji Deshmukh Registrar, SGBAU Amravati in session 2017-18



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Maintenance of 'Botanical Nursery' by students

Best Practice - 2

Title of the Practice: Blank Paper Bank - To Save the Paper to Save the Tree

Goals:

1. To save the paper to save the trees.
2. To bring environment consciousness among the student.
3. To make aware the students about the wastage of paper.
4. To cultivate the social ethics among the students.

The Context:

To create environment awareness among the student is the basic concept behind this practice. Million tons of paper produces every year. A ton of paper costs 17 trees. Thus, huge amounts of the tress are cut down by the industry to prepare the papers every year. Saving a piece of paper will ultimately save these trees. By saving the paper we can contribute in reducing the negative impact that paper production has on the natural forests reservoirs, people and wildlife that depends on them. Also it will contribute in reducing the climate change and keep our ecosystem healthy. So to save the papers, department of chemistry started the practice of Blank paper bank.

Practice:

- Students use new practical manual for every semester. After the end of session, some unused or blank pages remain in it.
- Students of chemistry department have started the practice of collecting such blank papers. **They ripped out all the blank pages** from the practical books, taking care not to rip the pages. **Trimmed** the rough edges to square off the rounded corners.
- Students assembled the stacks of paper sheets properly, having a hundred pages each. Then, these were sent to professional bookbinder for binding into note books.
- These note books prepared from blank papers were donated to needy children of village school and made them useful again.

Evidence of Success:

College students get aware about saving of the paper. Students not only donated their papers from the used manual but also collected paper from the students of their nearby houses. Thus, social awareness is developed among the student. In addition to note book student also donated some school stationary to the poor and needy students of village.

Resources Required: Interested student volunteers.

Problems encountered: It is found to be difficult to raise the fund for the preparation of note book.

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

Blank Paper Bank - To Save the Paper to Save the Tree



Note books prepared from blank papers were donated to needy children of village school

Best Practice - 3

Title of Practice: Eco friendly Ganesha Idol Preparation

Goals:

- To reduce water pollution due to immersion of idols in rivers
- To develop environmental consciousness.

The Context: -

India is country where festivals of all religions are celebrated with great enthusiasm and unity. But due to ever increasing population few practices in these festivals creating burden on environment and contributing in pollution. Ganesha festival in one of the widely celebrated events where Lord Ganesh idols are worshiped for ten days. Most of the time these idols are made by plaster of Paris (POP) which when immersed in rivers, contribute for water pollution and adversely affect water ecosystem.

An attempt was made to prepare Ganesha Idols by using Shadu soil, which gets dissolved easily in water after immersion. This not only created environmental awareness but also helped students to engage themselves positively to know their own hidden talents.

The Practice:

- Department of Microbiology in collaboration with Microbiologist society India, department of Social forestry and NGO NisargaKatta advertised event amongst students.
- All participants were provided with clay of shadu soil and trainers gave them hands on experiences and trained them to make beautiful idol.
- All participants were given certificates.
- Students of different religions were Felicited for making Ganesha Idol and giving message of communal harmony.

Evidences of Success:

Eco-friendly Ganesha idols were prepared and participants worshiped these idols instead on POP ones. An exhibition cum sell of these idols was organised. Minister Dr. Ranjeetji Patil, Dr. R.B. Heda, President of B.G.E. Society, Adv. M.G. Mohta Hon. Secretary B.GE Society and more than 400 people visited the exhibition. These eco-friendly idols helped to reduce water pollution as equal number of POP idols were not used.

Resources required: Shadu Soil, water, card board and skilled trainers.

Problems Encountered: No

Eco friendly Ganesha Idol Preparation



Hands on training of Eco-friendly Ganesha Idol Preparation



Best Practice - 4

Title of the Practice: Nature reading through Mobile photography

Goal: To create interest in Mobile Photography for aspects of nature and social awareness.

The Context:

Mobile is a much needed device for the today's generation. Peoples use mobile not only for talking but for many more other uses like internet surfing, chatting, photography and entertainment. To create positive use of Mobile, betterment for photography, to develop constructive interest about nature and social aspects and to elaborate hidden skill in students Mobile photography competition and exhibition was organized by the college. This contest definitely helps to develop keen interest in photography by mobile device with nature and social aspects. For constructive and hidden skill development this contest will be consider as best practice.

The Practice:

- This activity was conducted by ZEBRA cell, Zoology Department of College. Students from college participated in the contest and exhibited their Mobile photography collection.
- Photographs snapped by using mobile device only were accepted.
- Main condition for competition was that photographs should be in its original form, without any major editing except contrast and brightness change. Mobile photographs should be strictly related to the topics like nature and social aspects.
- Selected photographs were exhibited and arranged for competition.
- Jury members were appointed for selection of the photographs.
- Jury members selected photographs by technical criteria and according to the theme of the contest. Photographs selected for results and winners were declared.
- Winners were felicitated with attractive prizes, awards and certificates. 1st, 2nd, 3rd and two consolation prizes were awarded.

Evidences of Success:

About 80 students were participated in the photography competition and exhibition. All photographs taken by Mobile device were selected and DSLR camera photographs rejected from the contest. More than 300 students and staff took advantage of exhibition. Such exhibition creates interest, inspiration and motivation in other visitors of the exhibition. Such practice definitely helps students to develop their photography skill with positive and constructive purpose.

Resource Required: Any Android Mobile, Snapped photographs, exhibition place, Jury members related to the photography field etc.

Problem Encountered: For Mobile or DSLR camera photographs selection technical practice carried out for authentic verification.

Nature reading through Mobile photography



Mobile photography competition and exhibition: Session 2018-19



Mobile photography competition and exhibition: Session 2019-20

The Berar General Education Society's
Shri R. L. T. College of Science, Akola

Department of Zoology & IQAC
 Organized
**Different Events to celebrate virtually
 The Wild-Life Week 2020**

- o Assay Competition (Dr. Rashmi Joshi)
- o Mobile Photography Competition (Dr. S. Nagrale)
- o Quiz Competition (Dr. Rashmi Joshi & Dr. S. Nagrale)
- o Article Writing competition (Dr. Archana Sawarkar)
- o Wild Life Documentary (Dr. S. Nagrale)

Dr. Sushil Nagrale H.O.D. Dr. R.L. Rahatgaonka IQAC Coordinator
 Dr. Archana Sawarkar Dr. Sudhir Kohchale Dr. Rashmi Joshi
 Department of Zoology
 Shri RLT College of Science, Akola

World Wildlife Week
 October 1-7

Mobile Photography Competition
 (Celebrating World Photography Day | 19 August)
 Friday, August 27, 2021 | 1:00 pm

Congratulations !!!
 Results of Mobile Photography competition on the topic
Biodiversity and Environmental Impacts

1st winner: Rushabh Ingole 2nd winner: Sankarshi Bawaskar
 3rd winner: Abhishek Sawarkar Consolation Prize: Ujjwal Patel

Organized by:
 DEPARTMENT OF ZOOLOGY
 IQAC, SHRI R.L.T. COLLEGE OF SCIENCE, AKOLA
 Dr. S. M. Nagrale | 9379322455

Online Mobile photography competition: Session 2020-21 & 2021-22

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Mobile photography competition and exhibition: Session 2022-23



Expert's guidance about various techniques of nature and wildlife photography

Best Practice - 5

Title of Practice: Fitness Development Programme

Goals:

- To emphasis correct concept of Physical Fitness
- To explain importance of diet, indoor and outdoor physical activities.
- To know the importance of stretching exercises with practical session.
- To aware about overuses of Mobile is Harmful to Health.
- To aware about Addictions.

The Context:

Incidences of lifestyle-related diseases among children and adolescents are increasing day by day. Childhood obesity, depression and diabetes in children have become far more common today. It is necessary to maintain their physical as well as mental fitness level. Department of Physical Education and Sports of our college took initiative to emphasis correct concept of physical fitness, importance of diet, importance of indoor or outdoor physical activities and explain importance of stretching exercises with conducting the practical session through Fitness Development Programme for Students of School and Colleges.

The Practice:

1. Interaction with Students on the topic Physical Fitness, Physical Fitness related Activities, Diet, Indoor and Outdoor Sports Activities, Overuses of Mobile and Addiction.
2. Practice Session of Stretching Exercises with perfect schedule.
3. Performed Skit on 'Overuses of Mobile is Harmful to Health'.
4. Performed Skit to aware about 'Addiction'.
5. Oath taken by Students regarding daily exercise, minimum uses of mobile and keep distance from addiction

Evidences of Success:

1. Students, Teaching and Non-Teaching staff come to know the correct concept of Physical Fitness.
2. Students of School & Jr. College Level come to know how to develop Physical Fitness with indoor and outdoor Physical fitness and Sports activities related information in their proper age stage.
3. Students took Oath and gave assurance about they will do daily exercise, avoid overuses of mobile and always stay away from addiction.
4. 8000 Students from different Schools and Jr. Colleges were actively participated and get benefited from this Physical Fitness Development Programme.

Resources required: Team of Skilled trainers.

Problems Encountered: No

Physical Fitness Development Programme



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



8000 Students from different Schools and Jr. Colleges were actively participated and get benefited from this Physical Fitness Development Programme.

Best Practice - 6

Title of the Practice: Know Our Universe

Goals:

- 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.

The Context:

Universe awareness is an imagination, excitement and fun for youngsters. 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. The activities of Sky Observation Club (SOC) were started to create interest in astronomical observations, to create awareness, to clarify the myths about Solar and Lunar Eclipses among students, staff and society.

The Practice:

1. College student of any course with an interest in amateur astronomy is eligible for membership of Sky Observation Club (SOC).
2. An alumnus of our college, Dr. Nitin K. Oke, Former NASA Educator and Dr. P. A. Nagpure, coordinator of Diploma Courses in Astronomy, Shri Shivaji Science College, Amravati are working as a Technical Advisors of SOC.
3. SOC members organized popular lectures, quizzes, gave scientific information on telescope handling, arranged night sky observation sessions, organized practical sessions for watching Solar Eclipse to the school's students and public.
4. Sky Observation Club (SOC) organized a special outreach program in collaboration with ASEEMIT Space & Environment Center, MITE Education Foundation Pune. Social Awareness Programme was successfully conducted for Solar Eclipse in 20 schools of Akola regions from 17th to 26th December 2019 under the guidance of Prof. S. R. Jaiswal. The video clips and PPTs were shown to nearly 1350 students from schools and institute which are provided by ASEEMIT Space & Environment Center, MITE Education Foundation Pune.
5. Every year Prof. S. R. Jaiswal delivers Lecturer about 'The Universe and Superstition about it' in NSS camp of college at gram Apoti khurd.
6. On National Science Day, 28th February 2020, Mr. Bhushan Gondachwar [B.Sc.-I], volunteer of Sky Observation club delivered a speech on "Astronomy" at Radhabai Sarada Arts, Commerce and Science College, Anjangaon surji, Dist. Amravati.
7. Astronomy Gallery is one of the major attractions of SOC. It includes colorful graphics of various astronomical events, telescope, and tools of astronomy including star dials, solar system and other models.
8. Thus, 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 to contribute the understanding of world around us.

Evidences of Success:

1. SOC provided many students their first look through an astronomical telescope.

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

2. 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.
3. 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.
4. Visit to Astronomy Gallery definitely increases visitor's interest towards study of astronomy.

Resource Required:

1. Skilled Resource persons
2. Tools of astronomy including telescope, models of star dials, solar system etc.

Problem Encountered:

1. Some time female students of nearby villages found it difficult to participate in night sky watching.
2. Visibility of stars and other celestial objects is reduced due to light pollution of the city.
3. Presence of more dust particles in the air adds difficulty in sky observation especially during winter season.



Astronomical Gallery' set up under guidance of Technical Advisor of SOC, Dr. Nitin K. Oke



Demonstration of astronomical instruments to the school students



Astronomy awareness programme at adopted village

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Night sky observation session



Astronomy awareness programme at various schools and colleges

Best Practice - 7

Title of Practice: To nurture the culture of environment consciousness not only among the students and faculty members but also in society.

Objectives of the Practice:

- To help the students and society to acquire knowledge of pollution and environmental degradation.
- To aware students and stakeholders about knowledge of the environment beyond the immediate environment including distant environment.
- To acquire a set of values for environmental protection and nurture ecofriendly habits among pupils.
- To provide an opportunity to be actively involved in ecofriendly activities and in environmental decision making.

The Context: One of the most glaring problems which the world faces today is the environmental pollution. There is an immediate need to make people aware about environmental degradation. Fostering a culture of environmental consciousness among the young generation is the need of the hour. Education and public participation may change and improve the quality of environment. As young citizens and future decision makers in society, students have to be inspired and engage with a sense of commitment and responsibility to protect our environment. Voluntary participation in activities may enable them to nurture environmental consciousness. Environment love, sensitivity and awareness can create a sense of respect towards nature and mother earth.

The Practice:

To nurture the culture of environment consciousness following activities were undertaken by our Institute-

- **Plantation Drive:** NSS and NCC Team of College in collaboration with Forest Office, Akola carried out plantation by taking precautionary measures. The plantation drive was also arranged by Department of Botany.
- **World Ozone Day** is observed every year on 16th September by organizing by organizing various events
- **Celebration of Wildlife conservation week:** Department of Zoology celebrated World Wildlife Week by organizing various activities to create awareness about Wildlife conservation
- **Publication of Biodiversity Calendar - 2021** was published to know value of biodiversity and inculcate environmental consciousness among students.
- **District Level Webinar on Conservation of Water:** College and Nehru Yuva Kendra (Ministry of Youth Affair and Sports), Akola has jointly organized the webinar under the theme of '*Catch the Rain, where it falls, when it falls*' on Monday 1^{5th} March 2021.

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

- **National E-Workshop on Organic Farming for Sustainable Agriculture** was organized on 24 March, 2021 for students, teachers, parents and farmers.
- **World Sparrow Day** was celebrated on 20th March 2021 virtually by collecting the different views and ideas of conservation of Sparrow.
- **State Level E- Workshop on Eco-friendly Holi** was organized in Collaboration with Gramayan Pratishtan (NGO), Nagpur on Dated 27th March.
- On the Occasion of **World Environment Day**, the NSS unit of College organized the Seminar Competition on “Restoring Ecosystem” .
- **Plastic Bags are banned** in college campus. As a part of Plastic Free Environment Campaign, Bann Stickers were displayed in the campus by NSS Unit.
- To inculcate importance of Bee keeping and honey processing in relation with entrepreneurship development Department of Zoology organized virtually 6 Days **E-Certificate Course in Apiculture**.
- **Online Certificate Course in Renewable Sources of Energy** was conducted from 24th June to 29th June 2021.
- **Workshop on E-Waste Management: Reduce, Repair, Refurbish, Recycle & Reuse** was organized on dated 11-08-2021.
- College and EFEC (Environment and Forest Education Centre) jointly organized an **awareness program to save electricity, paper and energy** on 26th August 2021.
- College undertook some **Ecofriendly projects** like- Reuse of waste and old furniture for making notice boards, vermicomposting, Periodical testing of drinking water etc.

Evidences of Success:

- Shri R.L.T. College of Science Akola has been recently Awarded as “**ONE DISTRICT ONE GREEN CHAMPION 2020-21**” under Swacchata Action Plan Scheme (SAP) by the hands of I.A.S. Hon. Neema Arora, Akola District Collector. This Award is by Government of India, Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Education.
- Honorable collector, Akola and President, Biodiversity administration committee, Akola took note of the environmental consciousness of the Institute and gave honor to our faculty member, Dr. Harish Malpani to work as a member of Biodiversity administration committee, Akola.

Resource Required:

3. Self motivated, Nature loving staff members and Skilled Resource persons.
4. Financial support to organize activities.

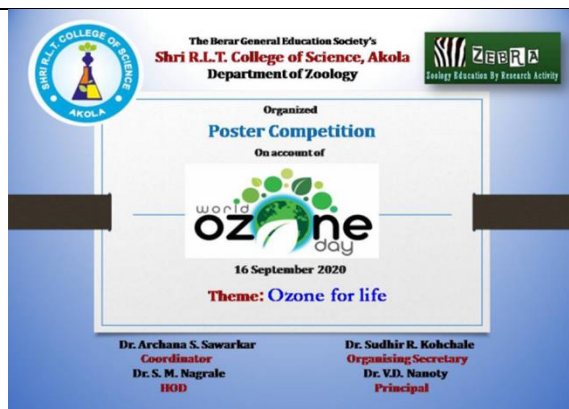
Problem Encountered: No

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

Nurturing the culture of environment consciousness

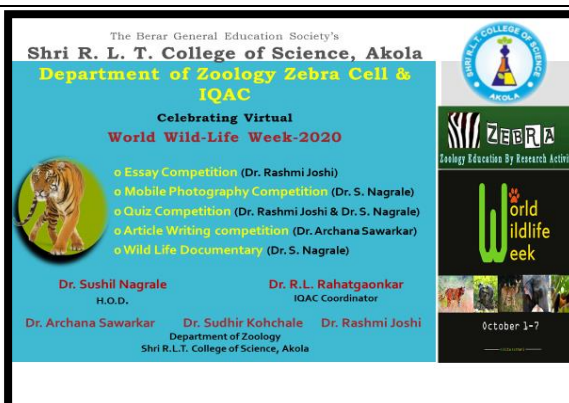


Plantation Drive at adopted village and in college



Online Poster making competition on theme 'Ozone for Life'

Rangoli Competition on topic "Caring for all life under the Sun" on Ozone Day



Celebration of Wildlife conservation week

Publication of Biodiversity Calendar - 2021

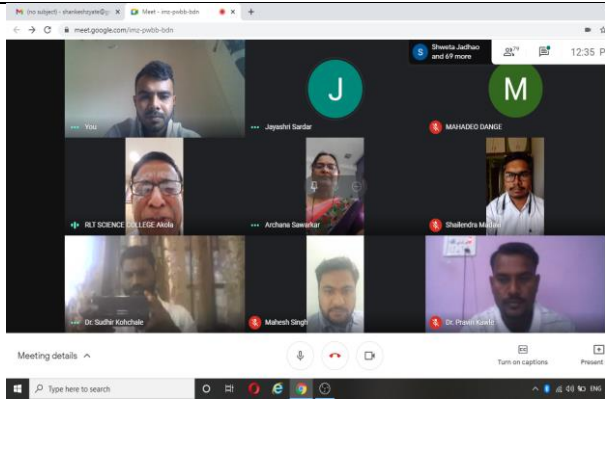
CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

Nehru Yuva Kendra, Akola
(Ministry of Youth Affairs and Sports)
And
The Bharat General Education Society's
Shri R.L.T. College of Science, Akola
(Recognized 'A' Grade by NAAC, Bangalore with CGPA-3.12)
Jointly Organizes
District Level Webinar on
Conservation of Water
on Monday 15th March 2021, at 12:00 noon
Theme - *Catch the Rain, Where it falls, when it falls*

Registration - Free to all
Registration Link: <https://forms.gle-h8BFL1geYzCode89>
Note: 1. Teachers, researchers, students (UG & PG) and a citizen may participate.
2. A virtual test exam will be conducted just after webinar.
3. Three top scorers will be selected and rewarded with medals, mementos and cash prize.

1st Prize 1000/-
2nd Prize 700/-
3rd Prize 500/-

Key Note Speakers
Dr. Sudhir R. Kohchale, Assistant Professor, Department of Zoology
Mr. Nikesh S. Ingle, Columnar, Rural Caravan
Organizing Committee: Dr. V. D. Nanoty, Principal, Shri R.L.T. College of Science, Akola
Organizing Secretary: Mr. Shankesh C. Zyate, Assistant Professor, Department of Chemistry
Convener: Mr. Mahesh Singh Shek, District Youth Officer, Nehru Yuva Kendra, Akola
Member: Dr. Archana S. Sawarkar, Assistant Professor, Department of Zoology
Member: Dr. Pravin R. Kawale, Assistant Professor, Department of Chemistry
Member: Mr. Shaileendra V. Mhatre, Assistant Professor, Department of Botany
All staff members of Shri R.L.T. College of Science, Akola



District Level Webinar on Conservation of Water under the theme of 'Catch the Rain, where it falls, when it falls'.

National Level E-Workshop on
Organic Farming for Sustainable Agriculture
Date: 24th March 2021
Sponsored by **Indian Science Congress Association (ISCA)**
Amravati Chapter
Organized by **Shri R.L.T. College of Science, Akola**
Co-located by **Sri R.L.T. College of Science, Akola**
Co-located by **Shri R.L.T. College of Science, Akola**
Co-located by **Shri R.L.T. College of Science, Akola**

About E-Workshop
This workshop is primarily for the students of the Agricultural Field of the Agricultural College of Akola. The workshop will focus on the concepts of organic farming, its benefits, and the various techniques used in organic farming. It will also cover the importance of organic farming in sustainable agriculture and the role of organic farming in the development of a sustainable agriculture system.

About Institute
The Indian Science Congress Association (ISCA) was founded in 1906. It is the largest and oldest scientific organization in India. It has a long history of promoting scientific research and education in India. The organization has a wide network of members and is active in various fields of science and technology.

Chief Guest and Inaugurator
Dr. V. D. Nanoty, Principal, Shri R.L.T. College of Science, Akola

Registration
Please visit following Google form link for free registration of participants: <https://forms.gle-1151515151>
Teachers, Students, Parents and all Earth lovers, Registered and Non-Registered participants are welcome to attend the workshop.
Registration Fee: Nil
Registration Link: <https://forms.gle-1151515151>

Prize 1000/-
Prize 700/-
Prize 500/-

Organizing Committee
Dr. V. D. Nanoty, Principal
Dr. Archana S. Sawarkar, Assistant Professor
Dr. Pravin R. Kawale, Assistant Professor
Dr. Mahesh Singh Shek, District Youth Officer

माहिती • श्री रातले विज्ञान महाविद्यालयात सौंदर्य शैलीत राष्ट्रीय कार्यशाळा; १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग
दुष्परिणाम टाळण्यासाठी सौंदर्य शैली सक्षम पर्याय

प्रतिनिधी | अकोला
सौंदर्य शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग. ही कार्यशाळा शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग. ही कार्यशाळा शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग.

सौंदर्य शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग
शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग. ही कार्यशाळा शैलीत राष्ट्रीय कार्यशाळा १५ मार्चातील ७२५ परिष्काराच्या उर्फ सफूर्त सहभाग.

National E-Workshop on Organic Farming for Sustainable Agriculture

The Bharat General Education Society's
SHRI R.L.T. COLLEGE OF SCIENCE, AKOLA
Department of Zoology and IQAC
Celebrating
"World Sparrow Day"
20 March 2021
Zebra Cell, Department of Zoology & IQAC organizing an innovative virtual competition for U.G. students and inviting the views on the theme
"Sparrow Conservation: Today's Need"
You can submit your views in about 500 to 1000 words on the given mail id:
zcell@shri-r-l-t.ac.in
Before 20/03/21 at 6:00 pm
All participants register yourself through the google form link given below:
<https://forms.gle-1151515151>

1. Best three views from registered participants will be selected and awarded.
2. The date should be mailed to post formal having your Name, Class and Name of Institution.
3. The last date of submission is 20/03/21 at 6:00 pm
4. All the participants will have the certificate of participation in their mail id after 24 hrs. of the feedback form. The feedback form link is <https://forms.gle-1151515151> and will open from 20/03/21.

Coordinator: Dr. Rashmi P. Joshi
MO: Dr. S.M. Nagale
IQAC Coordinator: Dr. R.L. Rahgaonkar
Principal: Dr. V. D. Nanoty
Members: Dr. A. S. Sawarkar, Dr. S. R. Kohchale



"Sparrow Conservation: Today's Need".

Installation of Bird Feeder in college campus

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

प्रकृति के संग प्रकृति के संग

The Bharat General Education Society's
Shri R.L.T. College of Science, Akola
CoE Law, Arts, Management & Engg.
(Recognized by NAAC with 'A' Grade CGPA 3.12)

STATE LEVEL E-WORKSHOP ON ECO-FRIENDLY HOLI

Organised by
Department of Botany
Environment Cell & IQAC
in Collaboration with Gramayan Pratishthan
(HGO), Nagpur

27th March 2021 at 4.00pm

Registration link: <https://forms.gle/MSWCG8ooPZZBnG578>

Our Patrons
Adv. M. G. Mohta
President
The Bharat General Education Society, Akola

Shri. V. S. Toshniwal
Sr. Vice President
The B.G.E. Society, Akola

Dr. R. C. Jain
Vice President
The B.G.E. Society, Akola

Shri. P. N. Maheshwari
Hon. Secretary
The B.G.E. Society, Akola

Er. A. G. Paranjape
Joint Secretary
The B.G.E. Society, Akola

All Executive Committee Members of the B. G. E. Society, Akola

Organizing Committee
Chief Organizer
Dr. Vijay D. Nanoty
Principal,
Shri R. L. T. College of Science, Akola

IQAC Coordinator
Dr. R. L. Raatgaonkar

Convener
Dr. A. A. Sangole
Assistant Professor
Department of Botany

Organizing Secretary
Ms. V. N. Badgaonkar
Head
Department of Botany

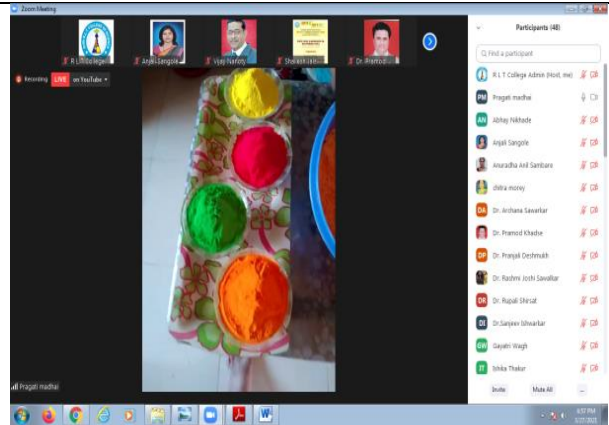
Members
Dr. P. M. Khadse
Assistant Professor
Department of Botany

Mr. S. V. Madani
Assistant Professor
Department of Botany

All members of Environment Cell

Technical Support
Dr. R. B. Ghayalkar
Assistant Professor
Department of Computer Science

Dr. S. R. Jaiswal
Assistant Professor
Department of Physics



State Level E- Workshop on Eco-friendly Holi

World Environment Day celebration



Plastic Free Environment Campaign

The Bharat General Education Society's
Shri R.L.T. College of Science, Akola
Recognized by NAAC, Bangalore with CGPA 3.12
Department of Zoology with IQAC

Organizes
E-Certificate Course in Apiculture
From
27th June to 2nd July 2021

Our Patrons
The B.G.E. Society, Akola

Our Patrons
The B.G.E. Society's Akola

Adv. M. G. Mohta
President

Shri U. S. Toshniwal
Sr. Vice President

Dr. R. C. Jain
Sr. Vice President

Shri P. N. Maheshwari
Hon. Secretary

Dr. A. G. Paranjape
Jt. Secretary

& All Other Executive Members

Organizing Committee Members and Speakers

Dr. V. D. Nanoty
Principal

Dr. R. Raatgaonkar
IQAC Coordinator

Dr. A. M. Nagrole
Convener

Dr. Rashmi P. Joshi
Organizing Secretary

Dr. A. S. Somvarkar
Dr. S. B. Kulkarni
Members

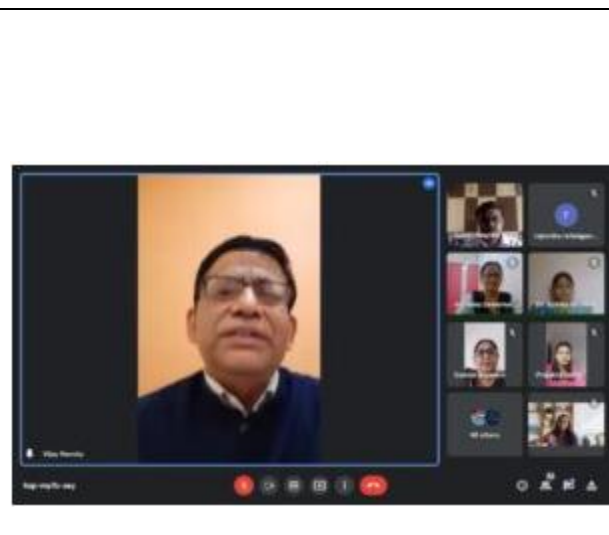
Dr. Amruta Shrikhate
Asst. Prof. (Zoology)
Maharaja Pratap Arts & Science College, Prun

Dr. Seema Kesarni
Asst. Prof. (Zoology)
M.S.B. Arts, Science and A.P.T
College, Nandgaon

Dr. Anshu Singh
Asst. Prof. (Zoology)
Rajaj College of Science,
Waranan

Dr. Pranjali Bhat
Asst. Prof. (Zoology)
B.S. Patel College, Dhulegaon
Kalis, Jalgaon Jambh.

Inauguration Program Links
Google meet link (27/06/2021 at 12 noon)
(For First 100 Students)
<https://meet.google.com/hsp-myfb-xey>
Or open Meet and enter this code: [hsp-myfb-xey](https://meet.google.com/hsp-myfb-xey)



E-Certificate Course in Apiculture

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



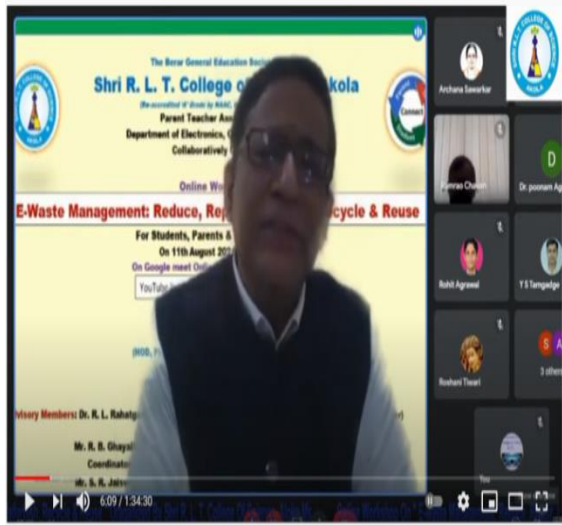
The Bharat General Education Society's
SHRI R.L.T. COLLEGE OF SCIENCE, AKOLA
Re-accredited 'A' Grade by NAAC, Bangalore with CGPA 3.12
Department of Physics
In Collaboration with IQAC
Organises
"Online Certificate Course in Renewable Sources of Energy"
From 24th to 29th June 2021.

Our Patrons <i>The B.G.E. Society's Alums</i>		Organising Committee Member and Speaker	
Avt. N. C. Mohite <i>President</i>	Shri V. S. Toshwal <i>Sr. Vice President</i>	Dr. V. D. Naawty <i>Principal</i>	Dr. Poojaram Agrawal <i>Department of Chemistry</i>
Dr. R. C. Jain <i>Jr. Vice President</i>	Shri P. N. Maheshwari <i>Exec. Secretary</i>	Dr. R. L. Bahatganekar <i>IQAC Coordinator</i>	Dr. Anjali Sengale <i>Department of Botany</i>
Dr. A. G. Paranjape <i>Jr. Secretary</i>	Shri P. P. Gadam <i>Co-coordinator</i>	Dr. R. M. Agrawal <i>Coordinator</i>	Dr. Anand Jadhav <i>Department of Zoology</i>
& All Other Executive Members		Shri S. R. Joswal <i>Organising Secretary</i>	Dr. Ashish Sarup <i>Department of Chemistry</i>
			Shri Sandeep Toshwal <i>Department of Microbiology</i>

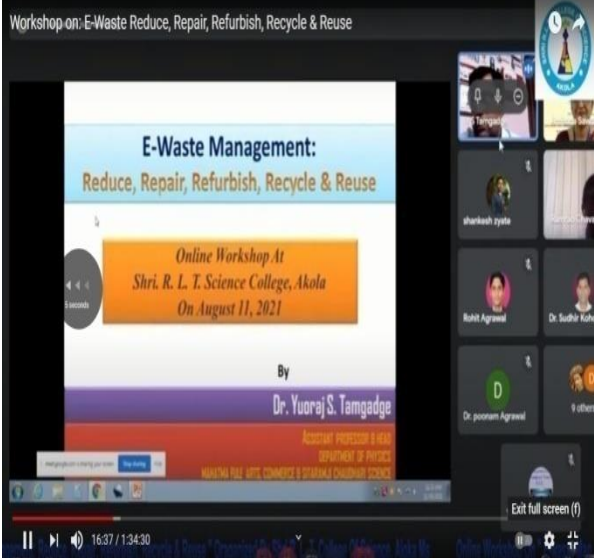


A screenshot of a Zoom meeting grid showing multiple participants in a grid layout. The interface includes a search bar at the bottom, a system tray with the time 12:25, and various meeting controls like mute, video, and chat.

Online Certificate Course in Renewable Sources of Energy



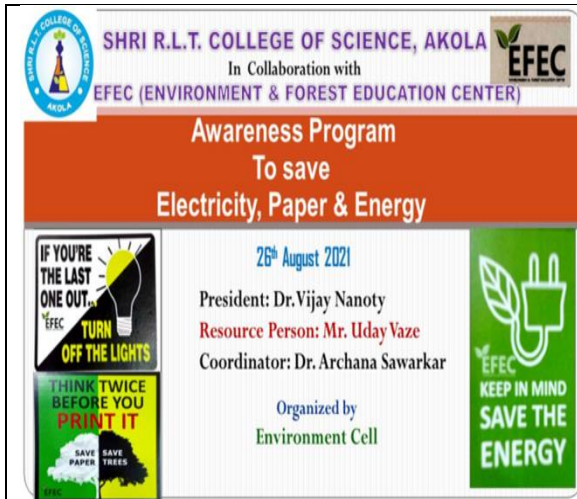
A screenshot of a Zoom meeting. A man in a white shirt and dark vest is speaking. The background shows a presentation slide with the college logo and text: "Shri R. L. T. College of Science, Akola", "Department of Electronics, Computer & Information Technology", "Online Workshop on E-Waste Management: Reduce, Repair, Refurbish, Recycle & Reuse", "For Students, Parents & Teachers", "On 11th August 2021", "On Google Meet Online".



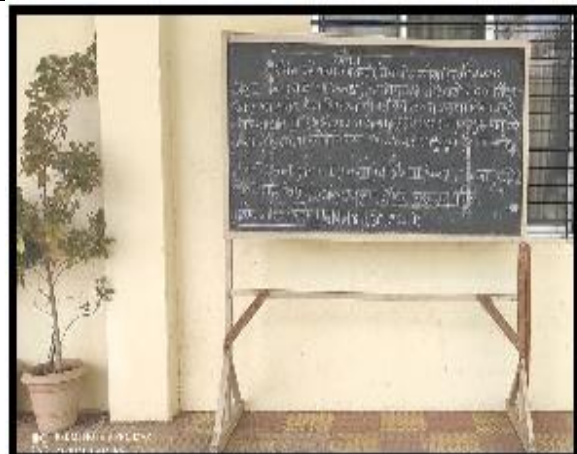
A screenshot of a presentation slide titled "Workshop on: E-Waste Reduce, Repair, Refurbish, Recycle & Reuse". The slide content includes: "E-Waste Management: Reduce, Repair, Refurbish, Recycle & Reuse", "Online Workshop At Shri. R. L. T. Science College, Akola On August 11, 2021", "By Dr. Yuoraj S. Tamgadge", "Assistant Professor & Head, Department of Physics, National Institute of Technology & Sustainable Management, Gandhinagar, Gandhinagar, Gandhinagar".

Workshop on “E-Waste Management: Reduce, Repair, Refurbish, Recycle & Reuse”

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

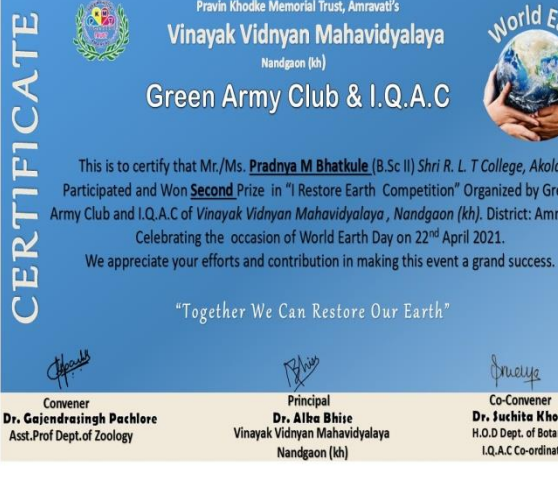
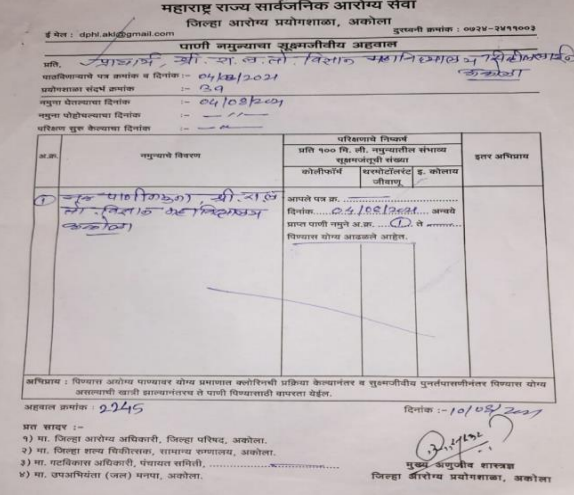

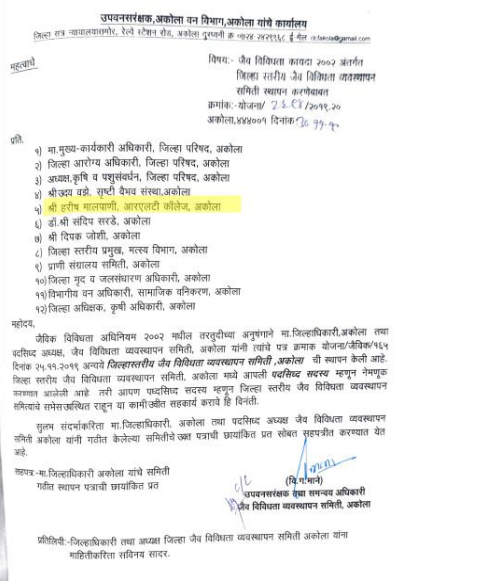


Awareness program to save electricity, paper and energy



Reuse of waste and old furniture for making notice boards and boards stands

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

	
<p>Participation of students in Various competitions related to Environmental issues</p>	<p>Periodical testing of drinking water</p>
	
<p>District Green Champion Award to College</p>	<p>Biodiversity administration committee, Akola</p>
<h3>Evidences of Success</h3>	

Title of the practice:

Best Practice - 8

Title of Practice: Working with Unnat Bharat Abhiyan (UBA): A step towards sustainable development of village.

Objectives of the Practice:

- To create a sense of social responsibility among college students.
- To acquaint the students with the rural lifestyle and to understand the problems of the villagers.
- Being a Participating Institution (PI) under Unnat Bharat Abhiyan (UBA) to involve in the process of Indigenous development of self-sufficient and sustainable village cluster.

The Context:

Unnat Bharat Abhiyan aims to **link the Higher Education Institutions (HEIs) with a set of at least five villages**, so that institutions can contribute to the economic and social betterment of these village communities using their knowledge base. The mission of our college is to do social work while spreading and promoting science culture in students and society. Hence, A village development plan for all the 5 adopted villages has been prepared in consultation with Honorable District Collector. To contribute in the noble work of Unnat Bharat Abhiyan, we decided to be a Participating Institution (PI) and provide helping hands for sustainable development of adopted villages.

The Practice:

- A village development plan for all the 5 adopted villages was prepared.
- UBA Coordinator of college organized Gram Sabha and mahila Sabha (Self Help Groups).
- UBA Coordinator and volunteers visited to the village school and interacted with teachers and students.
- Awareness Banners were displayed and rallies were organized.
- Cleanliness drive was conducted.
- Soak pits were prepared.
- Covid Vaccination Awareness campaign and Covid Vaccination camp were organized in village.
- Demonstration and hands on training workshops, Lectures on Biodiversity conservation were organized in village.
- Grievances of people were noted, the major problems in the area were observed and solutions were found out.
- The Base line survey of 5 villages was done by the students and the Nodal officer, UBA of the institute.

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

Evidence of Success:

- The Seed money of Rs. 50,000/- was sanctioned and provided by National coordinating Institute, IIT Delhi for UBA Baseline survey.
- The Utilization certificate was submitted in due period and successfully going ahead for proposed project for sustainable village Development.
- Some needy students got opportunity to work under 'Earn and Learn' scheme for doing work of uploading baseline survey forms on Unnat Bharat Abhiyan portal.

Resources required:

- Trained team leader i.e. UBA Coordinator of College and devoted student volunteers.
- Seed money
- Transportation facility
- The baseline survey forms and stationary etc.
- A healthy environment between villagers and participating institute.

Problems Encountered: No.

Working with Unnat Bharat Abhiyan (UBA): A step towards sustainable development of village. Photographic evidences

Awareness campaign about Unnat Bharat Abhiyan (UBA) scheme ↓



UBA Coordinator Dr. Rashmi Joshi organized Gram Sabha and mahila Sabha

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



UBA coordinator, while giving information to school teachers and students about Unnat Bharat Abhiyan project

Rally and cleanliness drive in Apoti village:

NSS volunteers cleaned the village area and convinced the villagers that cleanliness is the real key to good health. In the morning, Prabhat Feri was conducted to create awareness among the people of the village about health, environment and cleanliness. ↓



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Construction of soak pits at adopted village Apoti:

4 soak pits were prepared at different 4 places in adopted village. Volunteers under guidance of NSS program officers dug the pits and fill them with ballast and mud. ↓



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Covid Vaccination Awareness campaign and Covid Vaccination camp

The volunteers created public awareness about Covid Vaccination by interacting with the villagers through Street plays. Covid-19 vaccination camp was organized at Adopted village Apoti.



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Workshop and Hands on training on Making Herbal Products

One day workshop on “Making Herbal Products” to train the women from adopted village Aapoti khurd was organized by UBA Coordinator Dr. Rashmi Joshi in collaboration with Women cell of Shri R.L.T. college of Science, Akola. Hands on training was given to some of the ladies from village. Dr. Poonam Agrawal, Associate professor, Head Dept of Chemistry and Crystal Club members had given demonstration to make Herbal products.



CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Lecture on biodiversity conservation

Mr. Uday Vaze, Director, EFEC (Environment & Forest Education Center), Akola, guided villagers about conservation of local biodiversity. ↓



The Base line survey of Families

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

The Base line survey of 5 villages was done by the students and the Nodal officer, UBA, of the institute, Dr. Rashmi Joshi Sawalkar to clearly define the existing scenario and to collect the basic data. They identify problems faced by the people as well as the potential for development.



Sr.no.	Name of Adopted Villages	No. of Families surveyed
1	Apatapa	223
2	Apoti Khurd	144
3	Apoti Budruk	163
4	Sultanpur	55
5	Akhatwada	183

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

‘Earn and Learn’ Benefits to students

Students got opportunity to work under ‘Earn and Learn’ scheme for doing work of uploading baseline survey forms on Unnat Bharat Abhiyan portal ↓

Debit Voucher No. _____ Date : 18 / 12 / 2021 Cash Book Folle No. _____

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

Pay Rs. 2000/- in Words Two thousand only.

to Shri Ku. Sejal Vijay Badode.

on account of Unnat Bharat Abhiyan Honararium paid by cash of Rs.2000/- as on date 18.12.2021 against to upload forms on UBA Portal under Earn & Learn Scheme.

Rs. 2000/- Sanctioned
**PASSED FOR PAYMENT
 PAID & CANCELLED**
 Accountant
U.B.A. Coordinator
Dr. R.P. Joshi (Sawalkar)
 Principal
[Signature]
PRINCIPAL

Raha
 Received Payment of
 Rs. 2000/-
 Signature of payee
[Signature]

Debit Voucher No. _____ Date : 18 / 12 / 2021 Cash Book Folle No. _____

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

Pay Rs. 2000/- in Words Two thousand only.

to Shri Ku. Rutuja Ramdas Thakare.

on account of Unnat Bharat Abhiyan Honararium paid by cash of Rs.2000/- as on date 18.12.2021 against to upload forms on UBA Portal under "Earn & Learn" Scheme.

Rs. 2000/- Sanctioned
**PASSED FOR PAYMENT
 PAID & CANCELLED**
 Accountant
U.B.A. Coordinator
Dr. R.P. Sawalkar (Joshi)
 Principal
[Signature]
PRINCIPAL

Received Payment of
 Rs. 2000/-
 Signature of payee
[Signature]

Debit Voucher No. _____ Date : 18 / 12 / 2021 Cash Book Folle No. _____

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

Pay Rs. 2000/- in Words Two thousand only

to Shri Ku. Vaishnavi Ramash Dalit B.M. @.

on account of Unnat Bharat Abhiyan Honararium paid by cash of Rs. 2000/- as on 18.12.2021 against to upload forms on UBA Portal under Earn & Learn scheme.

Rs. 2000/- Sanctioned
**PASSED FOR PAYMENT
 PAID & CANCELLED**
 Accountant
U.B.A. Coordinator
Dr. R.P. Joshi (Sawalkar)
 Principal
[Signature]
PRINCIPAL

~~2000~~
 Received Payment of
 Rs. 2000/-
 Signature of payee
[Signature]

Presentation of work in front of Regional coordinating unit of Unnat Bharat Abhiyan

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

Dr. Rashmi Joshi Sawalkar, UBA Coordinator, attended one day 'Tech 4 Seva' Workshop at Sant Gadge Baba Amravati University, Amravati, organised by Regional coordinating unit of Unnat Bharat Abhiyan. She presented work performed by Shri R.L.T. College of Science, Akola, as Participating Institute under Unnat Bharat Abhiyan as well as proposed plans for 5 adopted villages.



Best Practice - 9

Title of the Practice: Green Chemistry: An Innovative Technology

Objectives of the Practice:

- To drive chemistry students towards clean and green technology.
- To create awareness among students about environment protection
- Inspiring students to keep the environment pollution free by using minimum energy in daily life.

The Context:

The Drive towards clean technology in the chemistry laboratory in view of to reduce, to reuse, to recycle and to recover the natural resources requires a level of innovation and new technology. The green chemistry revolution provides an enormous number of opportunities to discover and apply new synthetic approaches using alternative feedstocks; ecofriendly reaction conditions, energy minimizations and the design of less toxic and inherently safer chemicals.

The Practice:

- Department of Chemistry took a green step towards the adaptation of green chemistry concept not only in the theory, but also applying it in laboratory for practical purposes.
- The laboratories are well constructed in the center of the college with proper ventilation and considering the sunlight factor also. So, there is no need of light during the day time in laboratory which help to save the Electrical energy.
- Procedure of many practicals have been changed in vision to avoid the use of harmful and toxic materials.
- The faculties of our department allot the project related to Green Chemistry and related to how to save the environment like water conservation, solid waste management etc.
- All the faculties used microwave instead of traditional heating process to save the Gas energy and time too. Many Projects of M.Sc. Students have been based on microwave synthesis only.
- In B.Sc. First year instead of using sodium hydroxide use of lithium hydroxide is done.
- Acids and bases are not thrown directly in basin. Acids and bases are first neutralized and then its disposal is done.
- Safety equipment's like hand gloves, goggles etc. are provided to the students and laboratory Assistant.
- Department of Chemistry took initiation for water harvesting, liquid and solid waste management.

Evidences of Success:

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

- Minimum use of electricity due to maximum natural light and air in laboratories.
- Due to non-conventional method of using microwave, 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.
- Many projects of waste water treatment, solid waste management and liquid waste management in chemistry laboratory are allotted to the students, which increases environmental consciousness in them.

Resource Required:

Apart from some apparatus will of teacher to apply Green Chemistry concept is must.

Problem Encountered:

The green chemistry revolution is providing an enormous number of challenges to those who practice in chemistry laboratory. With these challenges however there are number of opportunities to develop new technique and make the chemistry more interesting.

Green Chemistry: An Innovative Technology

Photographic evidences



Paper Bag Making workshop



Hands on workshop on Herbal Products

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Poster competition on Green Chemistry



Guest lecture on water management By Mr. Pangarkar

Resource person for online certificate course on Renewable sources of energy



Workshop on Hazardous Management and Fire Extinguisher Demonstration

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES



Use of Microwave for heating instead of tradition heating method to conserve the Gas energy



Use of various safety measures in The Departments of Chemistry

CRITERION VII: INSTITUTIONAL VALUES AND BEST PRACTICES

LIQUID WASTE MANAGEMENT IN COLLEGE CAMPUS

PROJECT REPORT
A dissertation submitted in partial fulfillment of the
Requirements of the degree of
MASTER OF SCIENCE

IN
CHEMISTRY
Submitted By
Miss. Komal Shankar Langote
Department of Chemistry
Shri. R.L.T. College Of Science, Akola
(NAAC Reaccredited with Grade A)

Guided by

Prof. Shankesh Zyate
Department of Chemistry,
Shri. R.L.T. College Of Science, Akola



P.G. DEPARTMENT OF CHEMISTRY
SHRI. R.L.T. COLLEGE OF SCIENCE, AKOLA
(NAAC Reaccredited with grade "A" with the CGPA 3.12)

2020-2021

HAZARDOUS CHEMICAL AND RADIOACTIVE WASTE MANAGEMENT IN COLLEGE CAMPUS

PROJECT REPORT
A dissertation submitted in partial fulfillment of the
Requirements of the degree of

MASTER OF SCIENCE IN CHEMISTRY

Submitted By
Miss. Shrutika Vijayrao Kadam
Department of Chemistry
Shri R. L. T. College of Science, Akola

Guided by

Prof. Shankesh C. Zyate
Department of Chemistry,
Shri R. L. T. College of Science, Akola



P.G. Department of Chemistry
Shri R. L. T. College Of Science, Akola
(NAAC Reaccredited with grade "A" with the CGPA 3.12)

2020-2021

Projects given to students on topic 'Waste Management'

