

दि बेरार जनरल एज्युकेशन सोसायटी, अकोला द्वारा संचालित

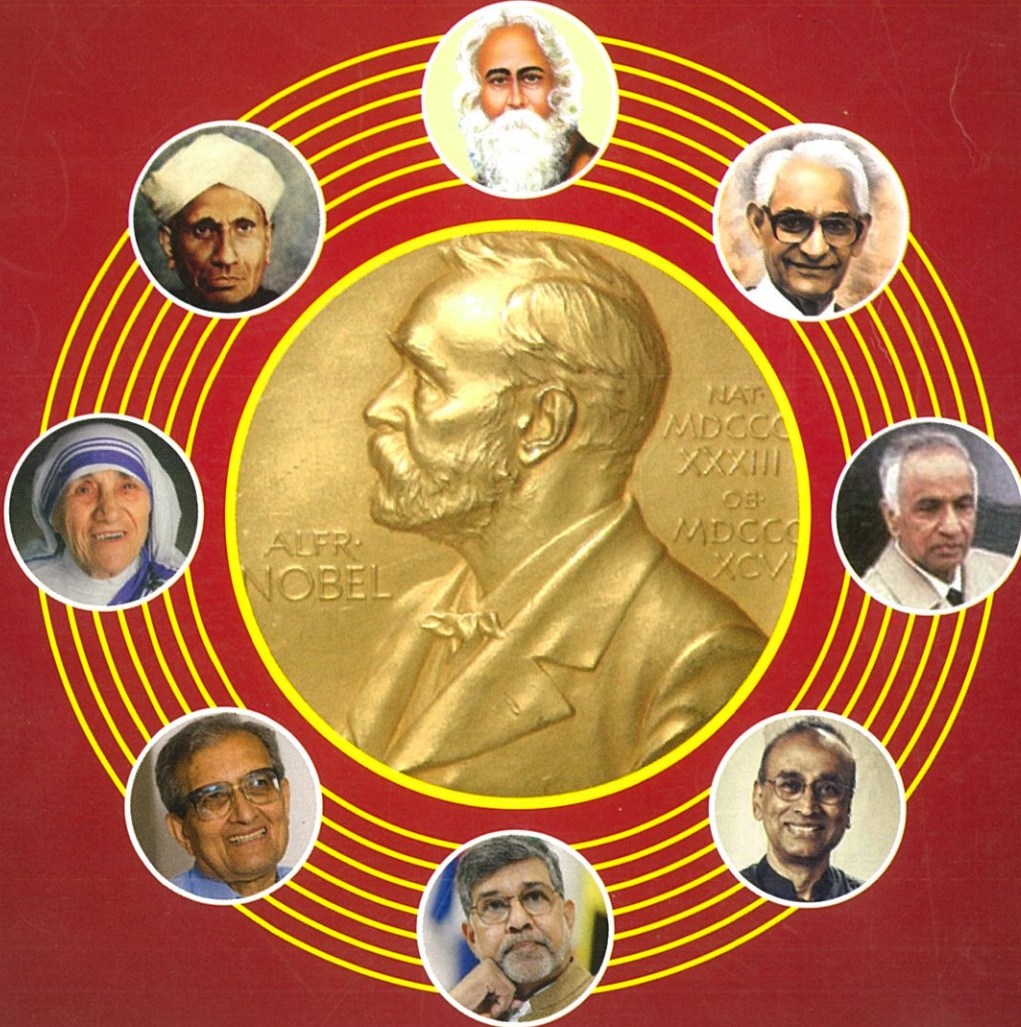
# श्री राधाकिसन लक्ष्मीनाथयण तौष्णीवाल विज्ञान महाविद्यालय, अकोला

नॅक 'अ' श्रेणी प्राप्त (सी.जी.पी.ए.-३.१२)

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## प्रतिबिंब

२०१७-१८



नोबेल पारितोषिक विजेते

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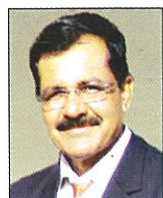


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Shri Radhakisan Laxminarayan Toshniwal College of Science dedicates itself to the cause of science education and propagation of scientific temper among the students, it seeks to mould a student into a multifaceted person with a pragmatic mind and a humane out look capable of facing the challenges of the 21st 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 his best to the country.

# प्रतिबिंब

॥ २०१७ - २०१८ ॥

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- ❖ हिंदी विभाग : कु. अनामिका देशपांडे
- ❖ इंग्रजी विभाग : कु. इनसीया वोरा

## संयोजक मंडळ

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प्रा. अरूण बी. खेडकर



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## *Message From the Principal*

Dear All,

Welcome to Shri Radhakisan Laxminarayan Toshniwal College of Science, Akola; a milestone of academic excellence and extra curricular performances which has enlarged and enriched Akola's educational map.

I would like to extend my heartiest congratulations to all students, staff members for bringing out such beautiful and creative output of students i.e. **'Pratibimb'** the college annual magazine.

Science education is the backbone of every nation and also a stepping stone for a country to move on in the niche of a developed nation. Our college has been one of the prestigious science colleges in Maharashtra.

The Management and the staff has been supportive of the various activities that were carried out by the students, recently our college is placed in 'A' Grade with 3.12 CGPA by NAAC, Bengaluru. I am specially thankful to our management for always giving us moral support and inspiration.

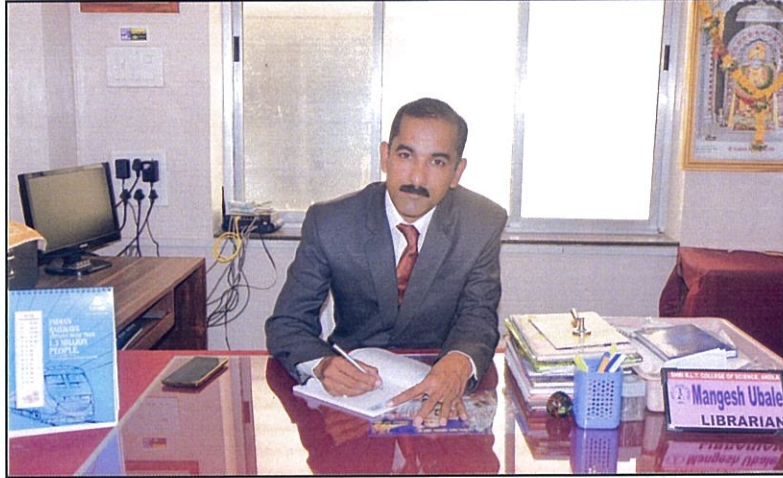
'Pratibimb' the college magazine exemplifies the voyage-transverse and exhibits the literary skills of our students.

To sum up, congratulations to editorial team for their determined efforts in bringing out this magazine.

**Dr. Vijay D. Nanoty**

Principal

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



## *Editor's Message*

Dear Readers,

"A weak link is better than a strong memory", nothing exemplifies it better than the nostalgic feelings that one gets while going through the dusty old pages of his or her college magazine. It can make a reader travel down the lanes of memory, giving birth to many emotions "**Pratibimb**", our college magazine is going to give the some pleasure to all the brilliant minds.

I am happy to see the level of enthusiasm that our students exhibited through their writing contributing to this college magazine. I stand awed by the sheer number of articles that have added colour to the magazine. This shows the positive energy of the faculty members and the students of the college.

Here, I express my sincere thanks to the writers who have contributed to this magazine. I am also thankful to the Hon'ble Dr. R.B. Heda, President and the Hon'ble Adv. Motisinghji Mohta, Hon. Secretary and all the executive members of the B.G.E. Society, Akola for their constant support and encouragement.

I am grateful to the Principal Dr. V.D. Nanoty for his guidance to give this work a concrete shape.

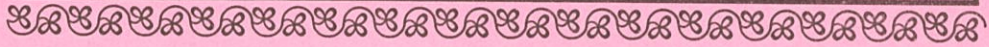
My thanks are also due to all the members of the college magazine committee, editorial board, students, teachers and all the members of R.L.T. family.

All the best.

  
**Mr. Mangesh R. Ubale**  
Editor



# *Marathi Section*





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## लिप वर्षाचे परिगणन (Calculation of Leap Year)

जगातील प्रत्येक देशात कालगणनेसाठी एक कॅलेंडर (दिनदर्शिका) वापरत असतात. आपल्या भारत देशात राष्ट्रीय कालगणनेसाठी तसेच देशांतर्गत व आंतरराष्ट्रीय घडामोडींच्या कालगणनेसाठी जे कॅलेंडर प्रचलीत आहे ते म्हणजे ग्रेगोरियन कॅलेंडर किंवा इसवी सनाचे कॅलेंडर. या Gregorian कॅलेंडर मधील वर्ष व सौर वर्ष (Astronomical year) यांच्या मध्ये लिप वर्षाच्या समावेशामुळे एकसामयीकता (synchronization) साधली आहे. सौर वर्षाचे कालगणन त्यातील दोन मुख्य काल एकके (units of time) 'दिवस' आणि 'वर्ष' यांच्या व्याख्या पृथ्वीच्या स्वतःभोवती फिरण्याच्या व सूर्याभोवती फिरण्याच्या दोन भिन्न गति म्हणजेच अनुक्रमे 'परिवहन गति' व 'परिभ्रमण गति' यावर आधारीत आहेत. ह्या दोनही गति संध (uniform) आहेत व त्यांचा कालखंड ठराविक (Fixed) आहे. वर सांगितलेली दिवस आणि वर्ष ही एकके मानवनिर्मित नसून निसर्गनिर्मित आहेत म्हणजे स्वव्याख्यित (self defined) आहेत. त्यांच्या व्याख्या खालीलप्रमाणे लिहिता येतील.

### १) वर्ष (अर्थात 'सौर वर्ष' Solar year किंवा Astronomical year) :

सूर्यमाले (solar system) मध्ये पृथ्वीला सूर्याभोवती एक पूर्ण फेरी मारायला जो कालावधी लागतो त्याला सौर वर्ष किंवा वर्ष असे म्हणतात. इतर ग्रहांचे फेरीचे कालखंड पृथ्वीच्या 'वर्ष' याच एककात मोजतात.

### २) दिवस (अर्थात 'सौर दिवस' Solar day) :

पृथ्वीला स्वतःच्या अक्षाभोवती फिरतांना एक फेरी पूर्ण करण्यास लागणारा कालखंड म्हणजे पृथ्वीवरचा दिवस (रात्रीसकट) होय.

पृथ्वीचे वर्ष पृथ्वीच्याच दिवसात मोजल्यास उत्तर येते.

$$१ \text{ वर्ष} = ३६५.२४२२ \text{ दिवस} \dots\dots (१)$$

वरील सुत्रात वर्षाचे दिवस पूर्णांक व अपूर्णाकात दिसतात. आता वर्षाचे कॅलेंडर तयार करतांना एक वर्ष हे पूर्णांक दिवसाचे ठेवणे सोयीस्कर होईल, म्हणजे प्रत्येक वर्ष हे एकतर ३६५ दिवसांचे किंवा ३६६ दिवसांचे घ्यावे लागेल. अन्यतः प्रत्येक वर्षात काही अपूर्णांक दिवस ठेवणे हे फार गैरसोयीचे झाले असते. ही गैरसोय लिप वर्षाच्या गणनेमुळे पूर्णपणे दूर झाली. कॅलेंडरकर्त्यांनी हे परिगणन दीड-दोनशे वर्षांपूर्वीच करून सामान्य वर्षात ३६५ दिवस व लिप वर्षात ३६६ दिवस ठेवले व ३६६ वा दिवस फेब्रुवारी महिन्याच्या २९ तारखेला समाविष्ट केला. अशा या लिप वर्षाचे गणन विद्यार्थ्यांना व आपणा सर्वांना लक्षात यावे, समजावे यासाठी हा लेखन प्रपंच आहे.

आता आपण वरील सूत्र क्रमांक (१) हे प्रमाण मानून लिप वर्षाचे परिगणना करू या.

सुरुवातीला म्हणजे इ.स. १ (A.D.) या वर्षी आपण एका वर्षाच्या कॅलेंडरमध्ये ३६५ दिवस घेवू. तसेच इ.स. २, ३ या वर्षी सुद्धा. पण असे करतांना सुत्र (१) प्रमाणे दरवर्षी ०.२४२२ दिवस शिल्लक राहतात. चौथ्या वर्षी हे अपूर्णांक दिवस

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

वाढत जावून  $0.2822 \times 8 = 0.9688$  इतके होतात म्हणजे जवळ जवळ १ दिवस जास्तीचा उरतो. म्हणून तो दिवस इ.स. ४ या वर्षाच्या कॅलेंडरमध्ये समाविष्ट करून त्यात  $365 + 1 = 366$  दिवस घ्यावे लागतील व इ.स. ४ या वर्षाला लिप वर्ष मानावे लागेल व वर सांगितल्याप्रमाणे इ.स. ४ या वर्षाच्या फेब्रुवारी महिन्यात २९ दिवस घ्यावे लागतील. ही गोष्ट दर चार वर्षांनी पुनरावृत्त (repeat) होत जाईल. म्हणून दर चार वर्षांनी येणाऱ्या वर्षात म्हणजे ४ ने भाग जाणाऱ्या वर्षात  $366$  दिवस येतील. यालाच 'लिप वर्ष' (Leap year) म्हणतात. इतर वर्षांना सामान्य वर्ष (Common year) किंवा (non leap year) म्हणू.

हे गणन इथेच संपत नाही, कारण आपण चौथ्या वर्षात  $0.9688$  ह्या आकड्यालाच १ समजून त्या वर्षात १ दिवस वाढविला. पण असे करतांना  $(1 - 0.9688 = 0.0312)$  इतका दिवस कमी धरल्या गेला.

अशा प्रकारे दर चार वर्षात  $0.0312$  दिवस या प्रमाणे अशा २५ चौकड्यात (म्हणजे १०० वर्षात) हा आकडा वाढत जावून  $25 \times 0.0312 = 0.78$  म्हणजे जवळ जवळ १ दिवस कमी धरल्या गेला म्हणून १०० व्या वर्षी (४ ने भाग जावून सुद्धा)  $366$  वा दिवस न घेता आपण इ.स. १०० हे वर्ष  $365$  दिवसांचेच ठेवतो. म्हणजे सामान्य वर्ष. ही गोष्ट दर १०० वर्षांनी repeat होत जाईल म्हणून १०० नी भाग जाणारे वर्ष (century year) हे लिप वर्ष न होता सामान्य वर्ष ( $365$  दिवसांचे) राहिल.

पण पुन्हा असे करतांना आपण  $0.78$  म्हणजे जवळ जवळ १ समजून सुद्धा तो दिवस वाढविला नाही म्हणजे दर शंभर वर्षात  $1 - 0.78 = 0.22$  दिवस शिल्लक उरतात. अशा चार वेळा (म्हणजे ४ शतकात)  $0.22 \times 4 = 0.88$  म्हणजे जवळ जवळ १ दिवस साचतो. तो दिवस इ.स. ४०० व्या वर्षात समाविष्ट करून इ.स. ४०० हे  $366$  दिवसांचे म्हणजे लिप वर्ष होईल. अशा प्रकारे दर ४०० वर्षांनी येणारे (म्हणजे ४०० नी भाग जाणारे) वर्ष हे लिप वर्ष राहिल.

पण अजूनही असे करत असतांना दर चारशे वर्षांनी  $(1 - 0.88) = 0.12$  इतके दिवस आधीच वाढवून घेतलेले असतात. अशा ४०० वर्षांच्या आठ फेऱ्यात ते  $0.12 \times 8 = 0.96$  म्हणजे जवळ जवळ १ दिवस. म्हणजे  $3200$  वर्षात १ दिवस आधीच वाढवून घेतलेला असतो. म्हणून इ.स.  $3200$  हे वर्ष (४०० नी भाग जात असून सुद्धा) लिप वर्ष न होता सामान्य वर्ष होईल ( $365$  दिवसांचे). याप्रमाणे  $3200$  नी भाग जात असलेले सर्व वर्षे सामान्य वर्ष राहतील. पण अजूनही थोडे गणन बाकी राहिलेच आहे.  $3200$  व्या वर्षी आपण  $0.96$  लाच १ दिवस समजून गणन केले. पण असे करतांना  $1 - 0.96 = 0.04$  दिवस शिल्लकच राहिले.  $3200$  वर्षांच्या अशा २५ फेऱ्यात म्हणजे  $3200 \times 25 = 80000$  वर्षात शिल्लक दिवस  $= 0.04 \times 25 = 1$  दिवस. तो १ दिवस इ.स.  $80000$  मध्ये समाविष्ट करून त्यात  $366$  दिवस घ्यावे लागतील व इ.स.  $80000$  व  $80000$  चे सर्वच गुणक वर्षे हे लिप वर्ष होतील. इथे आपले गणन संपले.

ह्या परिगणनाचे थोडक्यात निष्कर्ष (लिप वर्ष मोजण्याची Algorithm) खालील प्रमाणे :-

१. इसवी सनाचे प्रत्येक अशतकी वर्ष जर ४ ने भाग जाणारे असेल तर लिप वर्ष व ४ ने भाग न जाणारे असल्यास सामान्य वर्ष राहिल.
२. इ.स. चे शतकी वर्ष जर ४०० नी भाग जाणारे असेल तर लिप व ४०० नी भाग न जाणारे असेल तर सामान्य वर्ष असेल. अपवाद इ.स.  $3200$  (४०० नी भाग जाणारे असून सुद्धा लिप वर्ष नाही)

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

३. इ.स. ३२०० व ३२०० नी भाग जाणारे सर्व वर्ष सामान्य वर्ष राहतील. तरी पण ८०,००० व ८०००० च्या पटीतील वर्षे लिप वर्ष असतील. इतर सर्व वर्षांना वरील नियम १ व २ प्रमाणे लिप किंवा सामान्य वर्ष ठरविता येईल.
४. तसेच B.C. (इ.पू.) मधील वर्षे वरील नियमांनीच लिप किंवा सामान्य ठरविता येतील. त्यासाठी फक्त Number Line वरील Zero ठरवावा लागेल व तेथून इ.पू. ही गणना डावीकडे करावी लागेल. हा Zero काल म्हणजेच ००:००:०० मध्यरात्र (दि. १-१-१ ची सुरुवात) व डावीकडे इ.पू. (B.C.) १, २, ३... इत्यादी. आणि आपण इ.स. (A.D.) साठी लिप वर्षाचे जे परिगणन केले, अगदी तेच परिगणन इ.पू. (B.C.) साठी म्हणजेच zero च्या डावीकडे करणे वैध (valid) राहिल (ते इ.पू. साठी वेगळे गणन करण्याची गरज नाही). म्हणून इ.पू. (B.C.) ची व इ.स. (A.D.) ची सारखीच वर्षे लिप किंवा सामान्य वर्षे असतील.

अशा प्रकारे पुढे येणारे कोणतेही वर्ष (व भूत काळातील पण) लिप वर्ष की सामान्य वर्ष आहे हे आपल्याला ठरविता येईल. स्वाभाविकपणे ह्या calculation ला मर्यादा आहेत. कारण आपण ज्या सुत्र (१) वर आधारीत गणन केले त्यात जर कालांतराने (५०-६० हजार वर्षात) बदल झाला तर हे सर्वच calculation बदलून जाईल. आणि हे होणे शक्य आहे. एका शास्त्रीय अचूक मोजणीनुसार पृथ्वीचा परिवलनाचा कालावधी दर ५०,००० वर्षांनी एक सेकंद वाढत आहे, म्हणजे आजचा २४ तासांचा दिवस हळुहळु वाढत वाढत जावून १८ कोटी वर्षांनी तो २५ तासांचा होणार आहे. तसेच विज्ञान व तंत्रज्ञान यांची प्रगती व झेप प्रचंड वेगाने वाढत आहे. त्यामुळे आपले हे लिप वर्षाचे गणन भविष्यात सुधारल्या जावू शकते. तरीपण येत्या ५०,००० वर्षाकरीता व इ.पू. ५०,००० वर्षाकरीता हे गणन बिनधोक ग्राह्य व अचूक समजून कॅलेंडरमध्ये समाविष्ट करण्यास हरकत नसावी.

उदारहण :

(टिप : खालील उदाहरणात लहान टाईपमधील वर्षे सामान्य वर्ष समजावे व बोल्ट टाईपमधील वर्षे लिप वर्ष समजावे.)

इ.स. १, २, ३, ४, ५, ६, ७, ८, ..... ९६, ९७, ९८, ९९, १००, १०१, १०२, १०३, १०४, .... १०८, .... १९६,  
.... २०० ... ३०० ... ४०० ... ५०० ... ६०० ... ७०० ... ८०० ... ९०० ... १००० ... ११०० ... १२०० ... १९००  
... २००० ... २००४ ... २००८ ... २०१२ ... २०१६ ... ३००० ... ३१०० ... ३२०० ...  
३३०० ... ६४०० ... ८०००० ... ८३२०० ... इत्यादी.

प्रा.डॉ. सुरेश वा. भवरे

सहयोगी प्राध्यापक व गणित विभाग प्रमुख

समन्वयक 'Sky Observation Club'

## रविन्द्रनाथ टैगोर - नोबेल पुरस्कार विजेते

रविन्द्रनाथ टैगोर यांचा जन्म ७ मे १८६१ ला कोलकत्ता मधील जोर सांको भवन मध्ये झाला. यांचे वडिल देवेन्द्रनाथ टैगोर ब्रम्ह समाजाचे नेता होते. रविन्द्रनाथ त्यांच्या घरात सर्वात लहान होते, साहित्य आणि कलेचे मोठे प्रेमी होते. त्यांचे कुटुंब हे कोलकत्ता मधील प्रतिष्ठित कुटुंबातील एक होते.

भारताचे राष्ट्रगीत हे यांनी लिहीलेली अद्वितीय कलाकृती आहे. यामधून त्यांचे देशप्रेम स्पष्ट दिसून येते. रविन्द्रनाथ टैगोर यांना बालपणापासून काव्य आणि कथा लिहिण्यात रस होता. जवळपास आठ वर्षांच्या वयात त्यांनी त्यांची पहिली कविता लिहीली. कविता, नाटक, निबंध, चित्रकला आणि संगीत अशा विविध कलेमध्ये ते निपून होते. जवळपास वयाच्या ५१ व्या वर्षी त्यांनी 'गीतांजली' हा काव्यसंग्रह लिहून जगातील सर्वात बहुमानी नोबेल पुरस्कार प्राप्त केला. आणि भारतातील प्रथम नोबेल पुरस्काराचे मानकरी ठरले. प्रथम नोबेल पुरस्कार पटकविण्याची संधी भारताला टैगोर यांनीच दिली. 'गीतांजली' जगभरातील लोकांना इतकी पसंत पडली की त्यानंतर त्या संग्रहाला जर्मन, फ्रेंच, जपानी, रूसी इत्यादी भाषेत अनुवादीत करण्यात आले.

'गीतांजली' मुळे ते जगभरात प्रसिद्ध झाले. वडिलांची इच्छा त्यांना बैरिस्टर बनवण्यात होती. त्यांच्या इच्छापूर्ती करीता ते लंडन ला गेले. परंतु डिग्री विनाच परत आले आणि येऊन घराची जबाबदारी सांभाळू लागले आणि कला, साहित्यात जणू रमून गेले. ते मानत होते की शिकण्यासाठी वयाचे बंधन नसते. त्यामुळेच तर वयाच्या ७० व्या वर्षी त्यांनी चित्रकला काढण्यास सुरुवात केली.

रवीन्द्रनाथ टैगोर विश्वातील असे एकमेव व्यक्ति होते, ज्यांनी लिहिलेले काव्य हे दोन देशांचे राष्ट्रगीत आहे. भारताचे राष्ट्रगीत 'जन-गण-मन' आणि बांग्लादेशचे राष्ट्रगीत 'आमार सोनार बांग्ला'. त्यांच्या काही लोकप्रिय रचनात्मक काव्य आणि कथांमध्ये 'गोरा', 'घरे-बहिरे', 'काबुलीवाला', 'मास्टर साहब' आणि 'पोस्ट मास्टर' इत्यादींचा समावेश आहे.

१६ ऑक्टोबर १९०५ ला रवीन्द्रनाथ यांच्या नेतृत्वाखाली कोलकत्ता मध्ये रक्षाबंधन ह्या दिवशी 'बंग-बंग आंदोलन'ला सुरुवात झाली. त्यांनी १३ एप्रिल १९१९ ला जालियनवाला बाग हत्याकांडची घोर निंदा केली. त्यांनी त्या विरोधात ब्रिटिश सरकार कडून मिळालेली 'नाईट हुड' ही उपाधी अस्वीकार केली. नाइट हुड उपाधी मिळाल्यावर त्याकाळी 'सर' ही उपाधी मिळत असे.

साहित्यिक कार्यात अग्रेसर तसेच सामाजिक कार्यात उल्लेखनीय कामगिरी करणारे, समाजाबद्दल आणि देशाबद्दल आपली जबाबदारी जाणणारे, अष्टपैलू व्यक्तिमत्व रवीन्द्रनाथ टैगोर यांचे निधन ७ ऑगस्ट १९४१ ला कोलकत्ता येथे झाले. आताच्या काळातही त्यांच्या कथा आणि काव्य प्रसिद्ध आहे. 'Stories of Tagor' ह्या टेलिव्हिजन कार्यक्रमाच्या माध्यमामधून लोकांना आणि मुख्यतः युवापिढीला यांची प्रचिती होत आहे.

कु. सुनैना सुनिल बाटे

बी.एस्सी. भाग-३

## नोबेल पारितोषिक - एक सर्वश्रेष्ठ सन्मान

बुद्धीजीवी लोकांच्या विचारातून जेव्हा नविन संकल्पना रेखाटल्या जातात, त्या संकल्पना सर्वसामान्यांसाठी चमत्कार भासतात, पण चमत्कार ही दैवी शक्ति नसून मानविय वैचारिक शक्ति आहे. यालाच तर विज्ञान म्हणतात. विज्ञानाची तुलना केवळ एखाद्या विषयाशी न करता विज्ञान हे अकल्पित, अद्भूत असे रहस्य आहे. जिथे एका प्रश्नाचे उत्तर शोधण्यासाठी शंभर प्रश्नांना सामोरे जावे लागते. प्रत्येक प्रश्नच नविन शोध असतो.

अशाच प्रश्नांच्या जादुई सफरीसाठी निघालेल्या व्यक्तींचे नाव इतिहासात सुवर्ण अक्षरांनी कोरले जाते. आणि इतिहास नेहमी त्यांचीच दखल घेतो. जो आपल्या वैचारिक प्रगल्भतेला प्रयत्नांच्या विखात्यात कसून होतो. असं म्हणतात- 'Rom was not built in a day' त्याचप्रमाणे ही सुंदर स्थिती निर्माण व्हायला सुद्धा संघर्ष आणि मानवतेचे उच्चांक गाठणारे लोकच कारणीभूत आहेत. त्यांपकी एक 'एल्फ्रेड नोबेल' जे स्वतः एक संशोधक असून त्यांनी 'डायनामाईट' चा अविष्कार केला व जगप्रख्यात झाले. तसेच त्यांच्या नावावर उत्पादनाचे ३५५ पेटेंट आहेत. यामधून मिळालेल्या निधीतून त्यांनी जगातील समाजासाठी, विज्ञानाच्या अविष्कारासाठी व जागतिक शांततेसाठी झटणाऱ्या लोकांना सन्मानित केले जाते.

त्यांच्या या कार्यामधून 'वसुदैवम् कुटुंबकम्' चा संदेश मिळतो. नोबेल पारितोषिक विजेत्यांचे क्षेत्र जरी वेगवेगळे असले तरी ही ध्येय मात्र एकच आहे. जागतिक शांती, समृद्धी आणि वैज्ञानिक प्रगती हा पुरस्कार जगातील महान कार्य करणाऱ्या लोकांना प्रोत्साहन देतो.

'एल्फ्रेड नोबेल' यांनी जेव्हा 'डायनामाईट' सारख्या विध्वंसक शक्ति असलेल्या अविष्काराचा शोध लावला, तेव्हा त्याच्या भविष्यकालीन परिणामाची त्यांना जाणिव होती. म्हणूनच त्यांनी जागतिक शांततेला प्रोत्साहन दिले. डिसेंबर १८९६ मध्ये त्यांच्या मृत्यू पश्चात आपल्या संपत्ती मधील एक मोठा वाटा त्यांनी 'नोबेल' संस्थेच्या उभारणीसाठी दिला. या संस्थेच्या निधीमधूनच दरवर्षी या पुरस्काराचे आयोजन केल्या जाते. विज्ञानातून केलेल्या विकासाचे देणे मानवतेसाठी लागतं या त्यांच्या विचारांमुळे ते अजरामर झाले.

या विश्वविख्यात पुरस्काराच्या यादीमध्ये भारतीयांनी सुद्धा आपले नाव नोंदवले आहे. ज्यांनी कला, साहित्य क्षेत्रात उल्लेखनीय कामगिरी केली असे भारतातील पहिले नोबेल पारितोषिक विजेता 'रविंद्रनाथ टैगोर' यांना 'गीतांजली' या कविता संग्रहासाठी नोबेल साहित्य पुरस्कार प्राप्त झाला. तर अशाच सामान्यातून असामान्य असे कार्य करणारे 'चंद्रशेखर वेकंटरमन' यांना भौतिकशास्त्रामध्ये १९३० मध्ये नोबेल पुरस्कार मिळाला. त्यांच्या या संशोधनाला जगभरात 'रमन किरण' म्हणून प्रसिद्धी प्राप्त झाली. 'सुब्रमण्यम चंद्रशेखर' यांना सुद्धा १९८३ मध्ये भौतिकशास्त्रामध्ये नोबेल पारितोषिक मिळाले.

२१ जून १९०० मध्ये स्थापन झालेल्या 'नोबेल' संस्थेमधून अर्थशास्त्रासाठी १९६८ मध्ये पुरस्कार देण्यास सुरवात झाली. 'अमर्त्य सेन' यांना १९९८ मध्ये अर्थशास्त्रामध्ये नोबेल पारितोषिक मिळाले. तर जागतिक शांततेसाठी १९०१ पासून पुरस्कार देण्यास सुरवात झाली. 'निर्मल हृदय' संस्थेच्या संस्थापिका 'मदर टेरेसा' यांना १९७९ मध्ये शांततेसाठी नोबेल पारितोषिक मिळाले. तर २०१४ सालचे शांततेसाठीचे नोबेल पारितोषिक 'कैलास सत्यार्थी' यांना मिळाले. अशा प्रकारच्या पुरस्कारांनी व या पुरस्कारास पात्र ठरलेल्या कला, साहित्य, भौतिकशास्त्र, रसायनशास्त्र, आर्थिकशास्त्र या विविध क्षेत्रातील नाव लौकिक प्राप्त केलेल्या लोकांनी खऱ्या अर्थाने या पुरस्काराचे मुल्य वाढविले व संपूर्ण जगाला एका मालेत बांधले आहे.

कु. काजल रामेश्वर जवके

बी.एस्सी. भाग-२

## नोबेलच्या शर्यतीत आपण कुठे ?

आपल्या देशात प्रतिभावंतांची कमतरता नाही पण तरीही आपण नोबेल पुरस्कार जिंकू शकत नाही यावर गांभीर्याने विचार करण्याची गरज आहे. भारतात हिंदी भाषा बोलणाऱ्यांची संख्या ५५ करोडपेक्षा जास्त आहे. भारतात दर ५०० किलोमीटर नंतर भाषा बदलते. ही भाषीय विविधता सांस्कृतिक विविधतेतून जन्मली आहे. यानुसार पाहिले तर साहित्याच्या भरभराटीसाठी भारतात फार चांगले वातावरण आहे. परंतु नविन साहित्याची ओळख जगापर्यंत पोहचू शकत नाही. जगाचा प्रश्न तर सोडाच पण भारताच्या एका कोपऱ्यात राहणाऱ्याला दुसऱ्या कोपऱ्यात निर्माण होणाऱ्या साहित्याची किती माहिती आहे किंवा त्यामध्ये त्यांना किती रस आहे ? एखाद्या भाषेच्या लोकांपर्यंत दुसऱ्या भाषेचे साहित्य पोहचण्यासाठी अनुवाद हा एकच मार्ग आहे. याच्याच आधारे तुम्ही जगापर्यंत पोहचू शकता. सध्यातरी भारतात हा मार्ग जेवढा सशक्त असायला पाहिजे तेवढा दिसत नाही. रविंद्रनाथ टागोरांची 'गीतांजली' ही रचना ज्यामुळे त्यांना साहित्यातील नोबेल पारितोषिक मिळाले ती सुद्धा जगापर्यंत अनुवादामुळेच पोहचली होती. भारतात नाही कथांची कमतरता आहे, नाही कथाकारांची, पण प्रश्न तर हा आहे की आपले भारतीय लोक आपले साहित्य विश्वव्यापक बनविण्याबाबत किती गंभीर आहेत ! येथे महत्वाची गोष्ट म्हणजे आपण आपली संस्कृति, साहित्य जगासमोर अशा रितीने मांडण्याची गरज आहे की आपली भाषा आणि संस्कृति जगातील कुठल्याही कोपऱ्यातील व्यक्तींना आकर्षक वाटली पाहिजे. जर साहित्य हे समाजाचे दर्पण असेल तर भारतात अशा अनेक गोष्टी आहेत ज्या जगाला आपल्याकडे खेचू शकतात.

आजही आपल्या देशातील वैज्ञानिकांचा व त्यांच्या शोधकार्याचा एवढा प्रचार प्रसार होत नाही जेवढा व्हायला पाहिजे. गुरुत्वीय तरंगांच्या ज्या शोधासाठी तीन अमेरिकी वैज्ञानिकांना भौतिकशास्त्राचा नोबेल पुरस्कार मिळाला, त्या शोधांमध्ये भारतीय वैज्ञानिकांचाही मोठा सहभाग आहे. एकुण ३२ भारतीयांनी गुरुत्वीय तरंगांचा शोधपेपर करण्यात आपले योगदान दिले आहे. परंतु असे असूनही आपण नोबेल पुरस्कार मिळविण्यात खुप मागे आहोत. मग ते विज्ञानाचं क्षेत्र असो वा साहित्याचं असो. दिडशे करोड लोकसंख्या असलेल्या आणि आठशे पेक्षा जास्त भाषा बोलणाऱ्या आपल्या देशाच्या खात्यात आतापर्यंत साहित्यासाठी फक्त एकच पुरस्कार मिळाला आहे. १९१० मध्ये भारताला साहित्याचा पहिला आणि एकुलता एक नोबेल पुरस्कार मिळून शंभर वर्षांपेक्षा जास्त काळ निघून गेला आहे. साहित्याच्या क्षेत्रामध्ये नोबेल पुरस्कारांची एवढी कमतरता असण्याचे कारण काय असेल ? काय भारतात अस काहीच लिहीलं जात नाही कि, जे जगाला आपल्याकडे आकर्षित करू शकेल ? कि मग भारतात जे काही लिहीलं जात आहे ते जगापर्यंत पोहचू शकत नाही? काय कारण आहे कि भारतात इतके साहित्य आणि शोधपत्र लिहूनसुद्धा भारताला नोबेल पारितोषिक मिळत नाही?

महात्मा गांधींना १९४८ साली नोबेल शांती पुरस्कारसाठी निवडण्यात येणार होते, पण नामांकनाच्या दोन दिवस आधीच त्यांचा वध करण्यात आला. त्यांना हा पुरस्कार मिळाला नाही कारण नोबेल पुरस्कार देणाऱ्या समितीने १९७४ सालापासून मरणोपरांत नोबेल न देण्याचा निर्णय घेतला होता. त्यांना हा पुरस्कार नाही मिळणे ही नोबेल पुरस्कारांच्या इतिहासातील सर्वात मोठी चूक आहे, असे असूनही त्यांना नोबेल पारितोषिकासाठी ५ वेळा नामांकित करण्यात आले होते. आतापर्यंत सगळ्यात जास्त नोबेल पुरस्कार अमेरिकेतील लोकांना मिळाले आहेत. भौतिकशास्त्रामध्ये अमेरिकेला एकुण २२२ लोकांना नोबेल पुरस्कार मिळाले आहे. मेडिसीनसाठी एकुण २१९ लोकांना नोबेल पुरस्कार मिळाले आहेत. केमिस्ट्रीसाठी

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

१९४ लोकांना नोबल पुरस्कार मिळाले आहेत आणि साहित्यासाठी एकुण १११ लोकांना हा पुरस्कार मिळाला आहे. शांतीसाठी १०२ तर अर्थशास्त्रासाठी ८३ अमेरिकेतील लोकांना नोबेल पुरस्कार मिळाले आहेत. अमेरिकेनंतर दुसऱ्या स्थानावर जर्मनी आहे, यानंतर ब्रिटेन आणि फ्रान्सचा क्रमांक लागतो, तर नोबेल पारितोषिकच्या शर्यतीमध्ये भारत अद्यापही खुप खुप मागे आहे.

कु. अस्मिता नरेंद्र गाडगे  
बी.एस्सी. भाग-२

### निसर्ग

कधी लुकलुकणारा तारा  
तर कधी भिजणाऱ्या धारा  
कधी सुर्याचा सहारा  
तर कधी चंद्रमाचा पहारा

कधी तापणाऱ्या उन्हाचा वारा  
तर कधी कोवळ्या सावलीचा गारा  
कधी सप्तसुरांचा ताल  
तर कधी इंद्रधनुष्याची ढाल

कधी हिरवी पिवळी झाडे  
तर त्यांची कधी गोड फुलं फळे  
कधी मंद वाहणाऱ्या लाटा  
तर कधी धुंद होण्याच्या वाटा

कधी स्पर्शाचा वारा  
तर कधी जगवणारा भारा  
हिच तर निसर्गाची काया  
देते रोज सुरवाची माया.

कु. नेहा भा. देशमुख  
बी.एस्सी. भाग-३

### आयुष्य

आयुष्य खुप सुंदर आहे  
सोबत कुणी नसलं तरी  
एकट्यानेच ते फुलवत राहा  
वादळात सगळे वाहून गेले  
म्हणून रडत बसू नका

वेगळं असं काही माझ्यात खास नाही  
असं म्हणून उदास होऊ नका  
मृगाकडे कस्तूरी आहे,  
फुलात गंध आहे,  
सागराकडे अथांगता आहे,  
माझ्याकडे काय आहे, असं म्हणून रडू नका  
अंधाराला जाळणारा एक सूर्य तुमच्यातही लपला आहे  
आव्हान करा त्या सूर्याला !!!

मग तो उगवेल तुमच्या आयुष्यात नवीन क्षितिज घेऊन,  
अंधारमय रात्र संपवून सोनेरी किरणांनी सजवून,  
मग रोजच उगवेल एक नवी सकाळ,  
उत्साह ध्येयाने भारून म्हणून....

आयुष्य खुप सुंदर आहे,  
सोबत कुणी नसलं तरी  
एकट्यानेच ते फुलवत रहा....!

कु. नेहा भा. देशमुख  
बी.एस्सी. भाग-३



## भारतीय नोबेल पारितोषिक विजेते

नोबेल पारितोषिक हा जगातील अत्यंत प्रतिष्ठेचा असा सन्मान आहे. रसायनशास्त्र, साहित्य, भौतिकशास्त्र, जगातील शांतता, वेधशास्त्र, अर्थशास्त्र आणि जीवशास्त्र या क्षेत्रातील अतुलनिय कामगिरीसाठी प्रतिवर्षी हा पुरस्कार दिला जातो. स्वाडिश वैज्ञानिक अल्फ्रेड नोबेलने आपल्या मृत्यु पत्रात या पुरस्कारांची तरतुद केली. त्यांच्या मृत्यूनंतर पाच वर्षांनी इ.स. १९०१ मध्ये सर्वप्रथम हा पुरस्कार देण्यात आला आहे. ऑक्टोबर २००६ पर्यंत एकूण ७६३ व्यक्तींना एकूण ७८१ नोबेल पारितोषिक देण्यात आली. नोबेल पारितोषिक हा पुरस्कार १० डिसेंबर इ.स. १९०१ पासून आरंभ झाला.

भारत ही पुण्यभूमि म्हणून ओळखली जाते. याच पुण्यभूमिवर जन्म घेणाऱ्या महात्म्यांची कामगिरी ही अतुलनिय आहे. अनेक क्षेत्रात त्यांनी आपले स्थान निर्माण केले आहे. त्याचप्रमाणे भारतीयांनी नोबेल पारितोषिक या क्षेत्रामध्ये आपली छबी निर्माण केली आहे. म्हणूनच ....

“थोर महात्मे होऊन गेले, चारित्र्य त्यांचे पहा जरा,  
आपण त्यांच्या समान व्हावे, हाच सापडे बोध खरा...”

ही व्याख्या ज्या महात्म्यांना संबोधली आहे ते म्हणजे पहिले भारतीय नोबेल पारितोषिक विजेता ‘गुरु रविंद्रनाथ टैगोर’ यांना १९१३ मध्ये साहित्य या क्षेत्रामध्ये हा पुरस्कार देण्यात आला. रविंद्रनाथ टैगोर हे एक महान कवी आणि रचनाकार होते. साहित्य या क्षेत्रामध्ये त्यांचे पुस्तक ‘गीतांजली’ साठी त्यांना नोबेल पारितोषिक मिळाले. तेच नाही तर त्यांनी ‘राष्ट्रगीत’ असे महान गीत या भारताला प्रदान केले.

अश्या अनेक महात्म्यांनी आपली छबी या क्षेत्रात निर्माण केली आहे. म्हणूनच भारताला ‘विश्वगुरु’ असे संबोधले जाते. कारण भारतीयांनी संपूर्ण विश्वात आपले स्थान या माध्यमातून निर्माण केले. त्याचप्रमाणे गुरु रविंद्रनाथ टैगोर यांच्यानंतर १९०० मध्ये महान वैज्ञानिक ‘सी.व्ही. रमन’ यांनी भौतिकशास्त्रामध्ये नोबेल पारितोषिक मिळविले.

वर्ष १९९० मध्ये ‘अमर्त्य सेन’ यांना अर्थशास्त्रामध्ये त्यांच्या योगदानासाठी नोबेल पारितोषिक मिळाले. त्यांनी त्यांच्या चाळीस वर्षात ३० भाषांमध्ये पुस्तके प्रदर्शित केली.

सर्वांना ठामपणे सांगणारी की, “मानव सेवा हिच ईश्वर सेवा” आहे, ती या भूमीची माता ‘मदर टेरेसा’. मदर टेरेसा यांनी ४१ वर्षांपर्यंत गोरगरिब, अनाथ व रोगींची सेवा केली. त्यांनी १९७९ मध्ये शांतीचा नोबेल पुरस्कार मिळविला. जर खरी देशभक्ति करायची असेल तर मदर टेरेसा यांच्या कार्यातून करा. त्या अल्बीनियीय होत्या पण मुळच्या भारतीय होत्या. त्यानंतर ‘गुरुगोबिंद खुराना’ यांनी चिकित्सा या क्षेत्रात नोबेल पारितोषिक मिळविले. डि.एन.ए. ची व्याख्या करणारे मुळ भारतीय पण अमेरिकी नागरिक होते.

‘सुब्रह्मण्यम चंद्रशेखर’ यांनी १९८३ मध्ये भौतिकशास्त्र या क्षेत्रात नोबेल पारितोषिक मिळविले ते मुळ भारताचे पण अमेरिकी नागरीक होते. त्याचप्रमाणे चिकित्सा विज्ञान या क्षेत्रात महत्वपूर्ण कामगिरी केली ते म्हणजे ‘वेंकटरमण रामकृष्णन’ यांनी, त्यांना रसायनशास्त्रा मध्ये २००९ साली नोबेल पारितोषिक प्राप्त झाले.

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

सर्वात महत्वाचे म्हणजे 'कैलाश सत्यार्थी' यांनी बाल अधिकारी सुरक्षा आणि बालश्रम याविरुद्ध लढाईसाठी २०१४ मध्ये नोबेल पारितोषिक मिळविले. त्यांनी 'बचपन बचाओ आंदोलन' ची स्थापना करून संपुर्ण विश्वात बालकांच्या अधिकारांच्या सुरक्षेसाठी अमाप असे कार्य केले. अश्याप्रकारे या महात्म्यांनी अप्रतिम कार्य करून संपुर्ण विश्वात आपले स्थान निर्माण करून प्रत्येक भारतीयां समोर आपला आदर्श निर्माण केला.

कु. निशा राजेश्वर चतरकर

बी.एस्सी. भाग-३

### अबोल प्रेम

लहान असता दोघे मिळून,  
तयार केला होता खोपा,  
तेव्हा आपल्या घरकुलाचा,  
अर्थ किती होता सोपा।

आज येणार उद्या येणार,  
मजला भास सारखा होतो,  
अन तुझी प्रतीक्षा करण्याचा,  
काही वेगळाच आनंद होतो।

तुझ्या नकारातही होकार असतो,  
याची मजला सतत आहे जाणीव,  
तुझ्या ओठावरचा होकार समजणे,  
हीच आहे माझी खरी उणीव।

माझं तुझ्यावरती प्रेम आहे,  
यात काही शंका नाही,  
आणि तुझं माझावर असावेच,  
असा माझा आवग्रह पण नाही।

कु. वैष्णवी अरूण जाधव

बी.एस्सी. भाग-३

### आई

आई म्हणजे घरुच मांगल्य  
आई म्हणजे लेकरुच वात्सल्य  
आई म्हणजे घरुच घरपण  
आई म्हणजे मुलाच शहाणपण

आई म्हणजे जीवनाचा आधार  
आई म्हणजे प्रेमाचा हुंकार

आई घरुचा आधारस्तंभ  
आई कुटुंबाचा दीपस्तंभ  
आई अस्तते एक शिल्पकार  
आई अस्तते एक कलाकार

आई अस्तते कष्टाळू, कनवाळू  
आई अस्तते सर्वांशी मनमिळावू

आई आहे सडनशिलतेची मुर्तिवंत  
आई घडवित अस्तते बुद्धीवंत  
आई अस्तते जातीवंत, जपत अस्तते शिलचरित्र  
आई अस्तते किर्तीवंत, जपत अस्तते शिलचरित्र

कु. वैष्णवी अरूण जाधव

बी.एस्सी. भाग-३

## नोबेल पुरस्कार विजेते भारतीय

नोबेल पुरस्कार हा जगातील सर्वात मोठा पुरस्कार मानल्या जातो, एवढच नाही तर हा पुरस्कार जगातल्या सर्वश्रेष्ठ लोकांना सन्मानित करण्याकरता दिला जातो. याची सुरुवात १९०१ सालापासून झाली आहे. या पुरस्काराला नोबेल पुरस्कार असे नाव एल्फ्रेड नोबेल यांच्या नावावरून देण्यात आले. हा व्यक्ति स्वीडनचा रहिवासी होता. त्यांनी डायनामाईट चा अविष्कार केला होता. नोबेल पुरस्कार हा भौतिकशास्त्र, रसायनशास्त्र, चिकित्सा, विज्ञान, साहित्य व शांती या क्षेत्रांमध्ये कार्य केलेल्या व्यक्तींना ते दिले जाते.

भारताला विश्वगुरु म्हटले जाते, एवढच नाही तर विश्वभरात भारतीयांनी आपली अमाप छाप सोडलेली आहे. खूप भारतीय लोकांना त्यांच्या उत्कर्षाच्या कार्यासाठी नोबेल पुरस्काराने सन्मानित केलेले आहे. नोबेल पुरस्कार विजेते भारतीय रविंद्रनाथ टागोर हे भारतीय पहिले व्यक्ति आहे ज्यांना नोबेल पुरस्कार मिळालेला आहे. महान कवी, रचनाकार गुरु रविंद्रनाथ टागोर यांना १९१३ मध्ये साहित्य या क्षेत्रात त्यांची काव्य पुस्तक 'गीतांजली' यासाठी त्यांना नोबेल पुरस्कार देण्यात आला. ते फक्त आठ वर्षांचे असतांनाच कविता लेखनास सुरुवात केली. ते असे एक व्यक्ति होते, ज्यांनी भारत व बांग्लादेश या दोन देशांसाठी राष्ट्रगीत लिहीले होते. 'गीतांजली' व 'साधना' हे त्यांचे दोन महत्वपूर्ण कृती होत्या. सर चंद्रशेखर व्यंकटरमन हे महान वैज्ञानिक यांना भौतिकशास्त्र या क्षेत्रात महत्वपूर्ण कार्य केले त्यासाठी त्यांना १९३० मध्ये नोबेल पुरस्कार देवून सन्मानित केले गेले. डॉ. रमन यांनी आपल्या कार्यात असा शोध लावला, जेव्हा प्रकाश पारदर्शक माध्यमातून जातो तेव्हा त्याची तरंगलांबी बदलते. यालाच रमन ईफेक्टच्या नावाने ओळखले जाते.

अमर्त्य सेन यांना सन १९९८ मध्ये अर्थशास्त्रामध्ये योगदानासाठी नोबेल पुरस्कार देण्यात आला आहे. त्यांनी दुष्काळात लोकांना अन्नासाठी मदत केली ते पहिले भारतीय व्यक्ति होते ज्यांना अर्थशास्त्रामध्ये नोबेल पुरस्कार मिळाला. गरीब, असाह्य आणि रोगींच्या सेवामध्ये तल्लीन झालेल्या मदर टेरेसा यांना १९७९ साली शांतीचा नोबेल पुरस्कार मिळाला. हरीगोविंद खुराना यांना अनुवांशिक कोड (DNA) ची व्याख्या करणारे भारतीय मुळचे अमेरिकी नागरीक. डॉ. हरीगोविंद खुराना यांना चिकित्साच्या क्षेत्रात अनुसंधानासाठी नोबेल पुरस्कार मिळाला. खुराना यांनी मार्शल, निरेग बर्ग, रॉबर्ट होल्ले यांच्या सोबत मिळून चिकित्साच्या क्षेत्रात काम केले. त्यांना कोलंबिया विश्वविद्यालयातर्फे १९६८ मध्ये हॉर्विग्न पुरस्कार सुद्धा प्राप्त झाला.

सुब्रह्मण्यम चंद्रशेखर यांना १९८३ मध्ये भौतिकशास्त्रामध्ये काम केल्याबद्दल नोबेल पुरस्कार देण्यात आला. त्यांच्या सिद्धांतावरून ब्रह्मांडाच्या उत्पत्तीबाबतीत अनेक रहस्यांची माहिती झाली. व्यंकटरमन रामकृष्णन हे चिकित्सा विज्ञान मध्ये महत्वपूर्ण कार्य करणारे. यांना २००९ मध्ये रसायनशास्त्र क्षेत्रात नोबेल पारितोषिक भेटले. त्यांना इजराईली महिला वैज्ञानिक अदा योनोथ आणि अमेरिकी थॉमस स्टीजच्या सोबत सन्मानीत केले. त्यांनी हे सांगितले की रायबोजोम्स वेगळे वेगळे रसायनांसोबत प्रतिक्रिया करतात. कैलाश सत्यार्थी ह्यांना बाल अधिकाराची रक्षा व बालश्रमच्या विरुद्ध लढाईच्या साठी वर्ष २०१४ मध्ये नोबेल पुरस्कार देण्यात आला. 'लहानपण वाचवा' आंदोलन ची स्थापना त्यांनी केली आणि विश्वामध्ये अनेक बालकांच्या अधिकाराची रक्षा केली. त्यांना पाकची मलाला युसुफच्या सोबत संयुक्त रूपात नोबेल शांती पुरस्कार देवून सन्मानीत करण्यात आले.

कु. वैष्णवी अरुण जाधव

बी.एससी. भाग-३

## नोबेल पुरस्कार प्राप्त भारतीय

नोबेल पुरस्कार हा जगातला सर्वात मोठा पुरस्कार मानला जातो. हा पुरस्कार जगातल्या सर्वात श्रेष्ठ लोकांना मिळतो. त्याची सुरुवात १९०१ पासून झाली आणि त्याला एल्फ्रेड नोबेल या नावाने संबोधले जाते. एल्फ्रेड नोबेल हे स्वीडनचे रहिवासी होते. त्यांनी डायनामाईट चा अविष्कार केला होता. नोबेल पुरस्कार भौतिकी, रसायन विज्ञान, चिकित्सा विज्ञान, साहित्य आणि शांती या क्षेत्रामध्ये ज्यांनी उत्कृष्ट कार्य केले, त्यांना हा पुरस्कार दिला जातो.

नोबेल पुरस्कार प्राप्त मदर टेरेसा यांच्याविषयी लिहायचे म्हटले तर जागतिक किर्ती मिळविलेल्या, जगातील महान महिला, सध्याच्या काळातील एक असामान्य, थोर व्यक्ति, एक थोर समाज सेविका म्हणून 'मदर टेरेसा' यांचा उल्लेख करावा लागेल. गोर-गरीब, अनाथ-अपंग अशा लोकांना आपले समजून जो प्रेमाने त्यांची सेवा करतो, तोच खरा साधु संत होय असे तुकाराम महाराजांनी एका श्लोकात म्हटले आहे. त्या दृष्टीकोनातून विचार केला तर मदर टेरेसा यांना खरोखरच संत म्हणणे योग्य आहे.

मदर टेरेसा यांचा जन्म २६ ऑगस्ट १९१० रोजी युगोस्लाव्हिया देशातील 'स्कॉपये' या गावी झाला. मदर टेरेसा यांचे वडिल 'अल्बेनियन' हे दुकानदार होते. आणि आई एका शेतकऱ्याची मुलगी होती. अल्बेनियन यांचे कुटुंब छोटंच होते. त्यामुळे फार श्रीमंती नसतानाही मदर टेरेसा यांचे बालपण अगदी सुखा समाधानात गेले. धर्माने त्या ख्रिश्चन होत्या. वयाच्या १८व्या वर्षी ऐन तारुण्यात उंबरठ्यावर असतांना सर्व संगपरित्याग करून त्या मिशनरी बनल्या. त्यांनी एक वर्षभर इंग्रजी अभ्यास केला.

नंतर त्या पाटणा येथे आल्या. 'अमेरिकन मेडिकल मिशन' मध्ये त्यांनी वैद्यकिय उपचार आणि परिचारिका यांचे प्राथमिक शिक्षण घेतले. नंतर मदर टेरेसा यांनी १९४८ साली कोलकत्याच्या 'मोतीझील' या झोपडपट्टीत आपले सेवा कार्य सुरु केले. तेथे त्या रोगी, अपंग-अनाथांची प्रेमाने सेवा सुरु केली. आबाल वृद्ध, स्त्री-पुरुष कोणीही असो त्यांच्यावर मदर टेरेसा प्रेम करित होत्या व त्यांची सेवा करित असत. म्हणूनच त्यांनी स्थापन केलेल्या 'निर्मल हृदय', 'शिशु भवन', 'महारोगी केंद्र' या संस्था मधील प्रत्येक व्यक्ति मदर टेरेसांना आई प्रमाणे वागवत.

मदर टेरेसा म्हणजे चालती बोलती प्रेममूर्ती होती. १९६२ साली भारत सरकारने यांना पद्मश्री ही पदवी देऊन त्यांचा बहुमान केला. 'पद्मश्री' हा पुरस्कार मिळविणारी पण भारतात न जन्मणारी ही पहिली महिला होय. पद्मश्री शिवाय आणखी कितीतरी बहुमान आणि पारितोषिक टेरेसा यांना मिळाली आहे. १९७२ साली इंदिरा गांधींच्या उपस्थितीत मदर टेरेसा यांना त्यावेळचे राष्ट्रपती गिरी यांच्या हस्ते 'नेहरू' पारितोषिक देण्यात आले. त्यापूर्वी १९७१ मध्ये २१,५०० डॉलर्स 'गुड स्यमोरीटन' हे पारितोषिक आणि तेविसावे पोप जॉन यांच्या नावाने देण्यात येणारे शांतता पारितोषिक हे मदर टेरेसा यांना देण्यात आले. शिवाय त्याच वर्षी पन्नास हजार पौऊंडाचे 'जोसेफ केनेडी ज्युनिअर फाऊंडेशन पारितोषिक' ही त्यांना देण्यात आले. १९७२ साली 'टेलटन फौन्डेशन' बक्षिसही मदर टेरेसा यांनाच मिळाले. पारितोषिक मिळालेले पैशातून त्या एकही रूपया स्वतः खर्च करित नसत. तो सेवाकार्यासाठीच वापरत. १९७८ मध्ये त्यांना शांततेसाठी नोबेल पुरस्कार मिळाला. १९८० साली त्या 'भारतरत्न' झाल्या. १९९३ साली 'राजीव गांधी सद्भावना अवार्ड' देण्यात आला. एवढे पुरस्कार, मान सन्मान मिळूनही मदर टेरेसा थोड्याही बदललेल्या नाहीत किंवा त्यांनी कार्य सोडून आराम ही घेतलेला नाही.

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

परमेश्वरावर त्यांची नितांत श्रद्धा होती.

आज जगात ठिकठिकाणी त्यांच्या कार्याच्या शाखा उघडलेल्या आहेत. पण असे असले तरी भारत देश आणि त्यातील कोलकता हे शहर त्यांनी स्वतःचे कार्यक्षेत्र म्हणून निवडलेले आहे ही जणू परमेश्वराचीच कृपा. मदर टेरेसा पक्षीय राजकारणापासून दूर होत्या. स्वतःचे सुख-दुःख विसरून सतत दुसऱ्यांच्या सुख-दुःखांचा विचार करणाऱ्या मदर टेरेसा म्हणजे एक अलौकिक, थोर 'स्त्रीरत्न' होय. मदर टेरेसा ही परमेश्वराने भारताला दिलेली देणगी आहे.

भौतिकशास्त्रात नोबेल पुरस्कार मिळविणारे सी.व्ही. रमन यांच्याविषयी लिहायचे म्हटले तर, भारताने आतापर्यंत जगाला अनेक वैज्ञानिक, खगोलशास्त्र, गणितज्ञ दिले आहेत. नोबेल पुरस्कार, भारतरत्न पुरस्कार, लेनिन शांती पुरस्कार, अश्या अनेक पुरस्कारांचे मानकरी आहेत चंद्रशेखर वेंकटरमन. प्रकाश प्रकीर्णन आणि रमन प्रभाव असे अनेक शोध लावून रमन भौतिक शास्त्रात मोठ्या स्थानी पोहचले आहेत.

सी.व्ही. रमन यांचा जन्म ७ नोव्हेंबर १८८८ रोजी झाला होता. त्यांचे वडील चंद्रशेखर अय्यर आणि माता पार्वती अम्मल तामिळनाडू येथील तिरुचिरापल्ली या गावी राहत. ते विद्यार्थी म्हणून शिकत असतानाच त्यांचे अनेक विषयांवर संशोधन सुरु होते. १९०६ मध्ये त्यांनी प्रकाश विवर्तन या विषयावर प्रबंध लिहिला होता तो लंडनमध्ये प्रकाशित झाला.

१९१७ मध्ये कोलकता विश्वविद्यालयात भौतिकशास्त्र प्राध्यापक पद निर्माण झाले तेव्हा विद्यापीठाचे कुलगुरु आशुतोष मुखर्जी यांनी त्यांना आमंत्रित केले. रमन यांनी मागचा पुढचा विचार न करता उच्च पदाचा त्याग केला आणि प्राध्यापक पद स्विकारले. १९२२ मध्ये त्यांनी 'प्रकाशाचे आण्विक विकरण' नावाचा मोनोग्राफ प्रकाशित केला. २८ फेब्रुवारी १९२८ रोजी अनेक वर्षांच्या परिश्रमानंतर त्यांनी 'रमन प्रभाव' याचे संशोधन पूर्ण केले. त्यांचे भौतिकशास्त्रातील योगदान पाहता १९३० मध्ये त्यांना नोबेल पुरस्कार देण्यात आला. जे.एन. टाटा यांनी सुरु केलेल्या भारतीय विज्ञान संस्थेचे १९३० मध्ये रमन निर्देशक झाले. ते पहिले भारतीय होते जे या उच्च पदावर काम करत होते. या संस्थेला उच्च मान मिळवून देण्यासाठी त्यांनी बरेच बदलाव केले. अनेक विदेशी वैज्ञानिकांना भारतात आणण्यासाठी त्यांनी खूप प्रयत्न केले. भारतातील वैज्ञानिकांना देखील खूप प्रोत्साहन दिले. त्यांच्या मुळेच भारताला विक्रम साराभाई, होमी जहांगीर भाभा, के.आर. रामनाथन यांच्यासारखे महापुरुष प्राप्त झाले.

त्यानंतर १९५२ मध्ये त्यांना उपराष्ट्रपती बनण्यासाठी आमंत्रण मिळाले होते, परंतु रमन यांना राजकारणात अजिबात रुची नसल्यामुळे त्यांनी नकार कळवला. १९५४ मध्ये भारत सरकारने त्यांना 'भारत रत्न' हा किताब दिला. तसेच १९५७ मधील लेनिन शांती पुरस्काराचे सुद्धा ते मानकरी ठरले. रमन ८२ वर्षांचे असतांना २१ नोव्हेंबर १९७० रोजी चैतन्यात विलीन झाले. परंतु जगाचा निरोप घेण्याआधी त्यांनी आपल्या संशोधनाचा बहुमूल्य ठेवा आपल्याला देऊन गेले. त्यांच्या स्मरणार्थ, रमन प्रभावाचा शोध लावणाऱ्या दिवशी म्हणजेच २८ फेब्रुवारीला भारतात 'राष्ट्रीय विज्ञान दिवस' साजरा केला जातो.

राष्ट्रीय विज्ञान दिवस डॉ. सी.व्ही. रमन यांनी त्यांचे विकिद्रणाबद्दलचे संशोधन २८ फेब्रुवारी १९२८ या दिवशी जाहीर केले. पुढे त्यांना त्याबद्दल नोबेल पारितोषिक मिळाले. म्हणून हा दिवस 'राष्ट्रीय विज्ञान दिन' म्हणून पाळला जातो. १९८७ मध्ये पहिला राष्ट्रीय विज्ञान दिन साजरा केला.

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

भारतीय जैव-रसायन शास्त्रज्ञ हरगोविंद खुराना हे भारतात जन्मलेले शास्त्रज्ञ आहेत. जनुकीय रचना व प्रथिनांच्या रचनेमधील त्यांचा महत्वाची कडी शोधण्याच्या महत्वपूर्ण कार्याबद्दल त्यांना रॉबर्ट डब्ल्यू. हॉली आणि मार्शल वॉरेन निरेनबर्ग यांच्या सोबत १९६८ चे वैद्यक शास्त्रातील नोबेल पारितोषिक मिळाले होते. त्यांचा जन्म भारतामध्ये रायपुर येथे झाला. त्यांचे शिक्षण १९४३ मध्ये बी.एस.सी. तसेच १९४५ एम.एस.सी. परीक्षा मध्ये ते उत्तीर्ण झाले. आणि भारत सरकारच्या शिष्यवृत्तीतून ते इंग्लंड मध्ये गेले. भारतामध्ये परत आल्यावर डॉ. खुराना यांना योग्य तसे काम मिळत नव्हते म्हणून ते इंग्लंड ला परतले. तिथे त्यांना केंब्रिज महाविद्यालयाचे सदस्य लार्ड टाड यांच्यासोबत काम करण्याची संधी प्राप्त झाली. आणि १९५२ मध्ये वैकवर ब्रिटिश कोलंबिया अनुसंधान परिषदच्या जैवरसायन विभागाचे अध्यक्षपद त्यांना मिळाले. चिकित्सा विज्ञान मध्ये नोबेल पुरस्कार १९६८ मध्ये त्यांना प्राप्त झाला.

डॉ. हरगोविंद खुराना एक भारतीय-अमेरिकी वैज्ञानिक होते ज्यांनी सन १९६८ मध्ये प्रोटीन संश्लेषण मध्ये न्यूक्लिटाइड ची भूमिका मध्ये अत्यंत चांगले प्रदर्शन दाखवून त्यांना चिकित्सा विज्ञान पुरस्कार प्रदान करण्यात आला. तसेच त्यांनी डी.एन.ए. अणु ची संरचना स्पष्ट केली आणि हे पण सांगितले की, डी.एन.ए. प्रोटीन्स चे संश्लेषण कशा प्रकारे करतो. नोबेल पुरस्कारा नंतर अमेरिकेने त्यांना 'नेशनल ॲकेडमी ऑफ साइंस' ची सदस्यपद प्रदान केले.

कु. पायल राजेश सोनवणे

बी.एस्सी. भाग-२

### माय-बाप

मायपित्याचा लळा जिव्हाळा हिच खरी दौलत  
मायपित्यावीन दुसरे नाही जगात या दैवत  
माय सोसते कळा भरवते अपुलकीचा घास  
पिता वाहतो भार घराचा अखंड सोसत त्रास  
वटवृक्षापरी पिता आणखी छाया त्यांची माय  
प्रेमावाचून त्यांना दुसरे हवेच असते काय  
आपुलकीवीन कधीही त्यांना ठेवू नये वंचित  
स्पर्शामधूनी त्यांच्या असते माया पाझरत  
पैसा असतो चंचल येतो जातो ही कैकदा  
पण आई-बाप लाभतात जन्मातून एकदा  
कळले इतके त्याला गवसले स्वर्गसुरवाचे रंगीत  
त्यांच्या प्रेमाची सावली असते गोडगुपीत

कु. अनामिका देशपांडे

बी.एस्सी. भाग-३

### वसुंधरा

आकाश काळ्या ढगांनी, व्यापून आज राहिले,  
स्मरताच त्या आठवणी, वावरून मन गेले,  
कुंद आले अवकाश, झाली वसुंधरा खुळी  
मन मनातल सारं, वदतुन शलाका गेली,  
लागताच चाहूल त्याची, हरपून ती गेली,  
ओढ त्या पावलांची, उठवून रोमांच गेली,  
गंध त्या मातीचा, लावून हूरहूर गेला,  
खेळ त्या ढगांचा, लावून आस गेला,  
बरसताच त्या जलधारा, तृष्णा ती भागते,  
हुंकार तृप्तीचा एक, हलकेच देवून जाते.

कु. अनामिका देशपांडे

बी.एस्सी. भाग-३

## सामर्थ्य

संकटाला कधी कंटाळायचं नसतं,  
त्याला सदैव सामोरं जायचं असतं

लोक निंदेला घाबरायचं नसतं  
आपल 'सामर्थ्य' दाखवायचं असतं

कुणी पाय ओढला तरी परतायचं नसतं  
पुढे आणि पुढेच जायचं असतं

जीवनात कोणी फुंकर मारली तरी विजायचं नसतं  
अगरबत्तीप्रमाणे दुसऱ्यांना सुगंध देत जळायचं असतं

तोडला देठ तरी कोमेजायचं नसतं  
गुलाबाप्रमाणे फुलायचं असतं

चंदनाप्रमाणे झिजायचं असतं  
सुटलं वादळ म्हणून डगमगायचं नसतं

वादळाला धैर्याने तोंड द्यायचं असतं  
काहीही झालं तरी हरायचं नसतं

हरवल तरी चाचपडत शोधायचं असतं  
जीवनात सतत धडपडायचं असतं

अपयशानं कधी खचायचं नसतं  
अपयशातून यशाकडे जायचं असतं

कु. अनामिका देशपांडे  
बी.एससी. भाग-३



## का बरे असे घडते ?

देश गरीब आहे म्हणतात,  
मग निवडणुकांवर अफाट खर्च का करतात ?

देशात हरितक्रांती झाली म्हणतात,  
मग लोक उपाशी का मरतात ?

'हम सब एक है' म्हणतात,  
मग भक्त राष्ट का मागतात ?

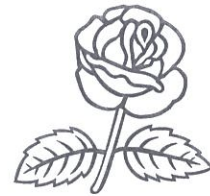
सर्वधर्म समभाव म्हणतात,  
मग दंगली का होतात ?

स्त्री-पुरुष समानता आहे म्हणतात,  
मग स्त्री आरक्षण का मागतात ?

दारूबंदी आहे म्हणतात,  
मग लायसन्स का देतात ?

जात-पात नाही म्हणतात,  
मग जातीचे प्रमाणपत्र का मागतात ???

कु. निशा राजेश्वर चतरकर  
बी.एससी. भाग-३



## भावनाहिन

मनात असंख्य दुःख असूनही  
चेहऱ्यावर नेहमी हसू आणणारी  
एकमेव व्यक्ती म्हणे 'बाप'  
बोट धरून चालवणारा  
पहिला सोबती म्हणे बाप,  
हाताला चटके सहन करणारी  
पण गोड जेवण देणारी  
मायेने जवळ घेणारी  
नि खूप खूप प्रेम करणारी  
अशी ती असते 'आई'  
जीचे नाव मरेपर्यंत  
सर्वांच्याच मुरवी सदैव राही,

काय माहित कसे हे,  
जीवनच असे बदलले  
आई-वडिलांचे अस्तित्व....  
वृद्धाश्रमातच धाडले  
जीवापाड प्रेम करूनही  
दया कुणालाच येत नाही  
कष्ट करून मोठे केले  
तरी कसे स्मरणात राहत नाही  
एकच नाते सत्य असते  
ते म्हणे बाबा-आई  
येऊ द्या थोड डोळ्यात पाणी  
त्यांची तुम्हाला चिंताच नाही.

मोठे झाल्यावर मोठेपण येते  
पण आतातर काही वेगळच होते  
जन्मदात्यांनाच घराबाहेर काढल्या जाते  
असे कसे करता तुम्ही, आता तरी जागे व्हा !  
आई वडिलांचा आदर करून  
प्रेम त्यांना जरूर द्या,

कंठ दाटतो त्यांचा नि येतात डोळ्यात अश्रू !  
तो आम्हाला विसरला,  
पण आम्ही कसे त्याला विसरू....

म्हणूनच जपून आता त्यांच्या भावना  
द्या त्यांच्या जीवनाला आनंदाचे रूप  
आता ही वेळ गेली काही नाही  
क्षण आहेत खूप !  
पाय धरा त्यांचे नि रडा खूप,  
एकदा त्यांना खूश ठेवा !  
अनुभवा त्यांच्या आनंदाचे सुख,  
हळूच मनात लागेल, त्यांना एका  
संस्काराची चाहूल, संस्काराची चाहूल.

कु. प्रिती देविदास ठाकरे  
बी.एस्सी. भाग-३

## आयुष्य आहे सुंदर

झेप घेण्या करिता आकाशांचे पंख असावे  
विश्व करण्या सुंदर कृतिशील हात असावे,

आयुष्य आहे सुंदर हसत खेळत जगावे...  
विश्वाला मानूनी घरटे ! प्रेमाने आनंदाने राहावे,

एक एक क्षण मोलाचा नवेनवे स्वप्न बघावे,  
मानवतेचा धर्म जपण्या जीवन समर्पित करावे

अहंकार अन् स्वार्थाला जीवनी नसावा थार !  
सत्संगाची धरावी कास वाहावा उन्नतीचा वार....

ज्ञान प्राप्ती करित; जीवन झाला पाहीजे वेडा  
तेव्हा कुठे वाजेल, यशाचा सनई चौघडा

कु. प्रिती देविदास ठाकरे  
बी.एस्सी. भाग-३



## दुष्काळ

यंदाच्याबी साली पडला दुष्काळ  
तिसरा डोळा उघडून उभा आहे काळ  
नाही ढग आभाळात अम्हा लागली फिकर  
स्वप्नावर माझ्या पाण्यानं फिरवल वरवर  
तापते जमीन जस पेटलय आंग  
आम्ही सांगुन थकलो मुकं जनावर ओरडून सांग  
नाही थेंब पावसाचा नाई उगवल चारं  
गुराढोराचे हाल आता, नाही ईरीले पाझरं  
उक्याचा विचार वाढे डोक्याले तान  
कोठरी लागली बुढाले नाही पुरणार दाण  
ज्यानं दिली चोच चारा देईल तोच, म्हणतात सारे जन  
आल तोंडाले जे घास त्यान घेतलं हिस्ळुन  
जाता तालुक्याच्या गावी पेढा लेकरू विचारे  
पाय कोट्यामधी ठेवी, ढोर आस लावती बिचारे  
एक पेढी भी आता डोळ्या सुरवावानी झाली  
सोन्यासारख्या ढोराची राख रांगोळीर झाली  
घ्यावो असच ठेवून कोणाकोणापुढं वाळु  
पोटच्या पोरसारख ढोर, खाटकाले कसा ईकु  
बस कर आता देवा मले जगवत नाही  
हाल माझ्या संसाराचे मला बघवत नाही  
आण कोप कोणाही देवाचा मले मारून टाक  
आणखी तापव रविराजा कर जाळूणीया खाक  
तुची विधातारे माझा तुच धुरकरी  
जन्म या मातीतच देजो पण नको शेतकरी

राधेश्याम राठोड  
बी.एस्सी. भाग-३

## सुखी ठेव देवा

कपट कंसाचे असतीलरे लहान  
खेळुनीया त्यासी तु झालासी महान  
कपट तर दुरंच इथे जगुनही दाखव,  
भक्ती तुझी करीन तुला देव मानीनं  
बापा तुझा मुखिया नव्हता कसलाच त्रास,  
मोजावे लागतात पैसे, घेता एक एक श्वास,  
चोरीले तुले लोणी, नाव त्यासी लीला दिला,  
चोरीता शिळी पोळी आम्ही आम्हा जेलमध्ये बंद केला  
हाथी बासरी तुझ्या, माथी पंख मोर,  
नसत घालाया अंगड इथ नेसाया धोतर  
हिडलास रथामधी होती अबादाणी  
आमचे खायाचेरे वांदे फिरावे लाग अनवाणी  
पियावया दुध ताक तुझी जिंदगी लाडाची  
भिती कुडाच्या रचल्या छत केलीया झाडाची  
सान्या जगाचा तु वाली, दुःख माझे का कळेना  
हिरे मोती तर दुर, रूपया डोळ्यानी दिसेना  
जन्म घेता मानवाचा निवडले खातेपिते घर,  
तु मुल सावकाराचा, आम्ही भिकान्याची पोरं  
सुखी ठेव जगतासी, विनवनी आखेरची देवा  
नसली दिवा बत्ती जरी लक्ष आम्हावरी ठेवा

राधेश्याम राठोड  
बी.एस्सी. भाग-३

# RLTion's Pride



**Ms. Sarika Surwade**  
1st Merit in M.Sc. (Microbiology) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Sneha Wankhede**  
2nd Merit in M.Sc. (Microbiology) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Farheen Maniyar**  
3rd Merit in M.Sc. (Chemistry) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Vrushali Wankhade**  
8th Merit in M.Sc. (Chemistry) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Rumaisa Haris**  
6th Merit in M.Sc. (Mathematics) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Renuka Agrawal**  
10th Merit in M.Sc. (Mathematics) Examination (S-2017) of S.G.B. Amravati University, Amravati



**Ms. Tejal Nerkar**  
B.Sc. III  
Colour in Badminton  
Best Sports Woman



**Ms. Nikita Ambuskar**  
B.Sc. III  
Colour in Judo & Wrestling



**Ms. Shivani Jadhav**  
B.Sc. II  
Colour in Wrestling



**Ms. Godavari Raut**  
B.Sc. II  
Colour in Wrestling



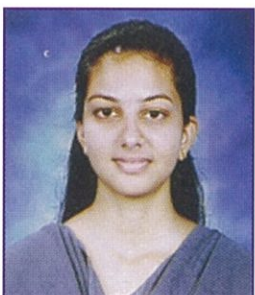
**Ms. Priya Kalalkar**  
B.Sc. II  
Colour in Wrestling



**Mr. Ruchiket Pote**  
B.Sc. I  
Colour in Power Lifting



**Mr. Vaibhav Karale**  
B.Sc. II  
Colour in Power Lifting



**Ms. Priya Wankhede**  
B.Sc. III  
Colour in Avishkar Research Festival (Chemistry)



**Ms. Insiyah Vora**  
M.Sc. II (Mathematics)  
Colour in Avishkar Research Festival (Mathematics)



**Ms. Varsha Yennewar**  
M.Sc. II (Chemistry)  
Colour in Avishkar Research Festival (Chemistry)

# RLTion's Pride



**Ms. Kanchan Mangtani**  
M.Sc. I (Microbiology)  
Colour in Avishkar Research  
Festival (Microbiology)



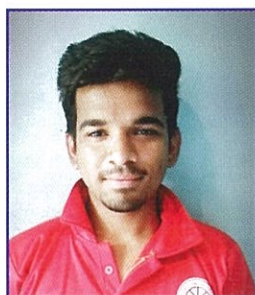
**Ms. Sayali Jagtap**  
B.Sc. III  
1st Prize in University Level  
Seminar Competition (AUCTA)



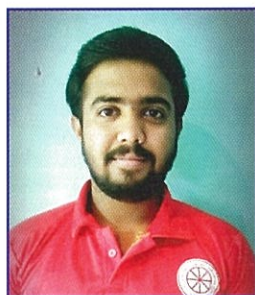
**Ms. Megha Rajpal**  
B.Sc. II  
1st Prize in University Level  
Seminar Competition (AUCTA)



**Mr. Atul Raut**  
B.Sc. III  
Achieved the award of  
Best NSS Volunteer at  
University & State Level



**Mr. Akash Kakde**  
B.Sc. II  
Participated in State Level  
'Avhan-2017' camp at  
Shivaji University, Kolhapur



**Mr. Akshay Ghope**  
B.Sc. II  
Participated in State Level  
'Avhan-2017' camp at  
Shivaji University, Kolhapur



**Mr. Swaraj Khawane**  
B.Sc. II  
Participated in State Level  
'Avhan-2017' camp at  
Shivaji University, Kolhapur



**Mr. Lalit Rakhonde**  
B.Sc. II  
Participated in State Level  
Republic Day Parade, Mumbai



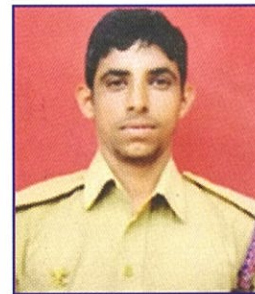
**Mr. Himanshu Sunariwal**  
B.Sc. I  
Participated in State Level  
Cleanliness Campaign Camp,  
Kalyan, Mumbai



**Mr. Akshay Gulhane**  
B.Sc. I  
Participated in State Level  
Adventure Camp,  
Chikhaldara



**Mr. Akash Nalwade**  
B.Sc. III  
Colour in All India TSC Camp,  
New Delhi



**Mr. Ashish Ghumre**  
B.Sc. III  
Colour in All India TSC Camp,  
New Delhi



**Dr. Rajesh Chandrawanshi**  
Director  
Physical Education  
Awarded with Ph.D. Degree  
by S.G.B. Amravati University,  
Amravati



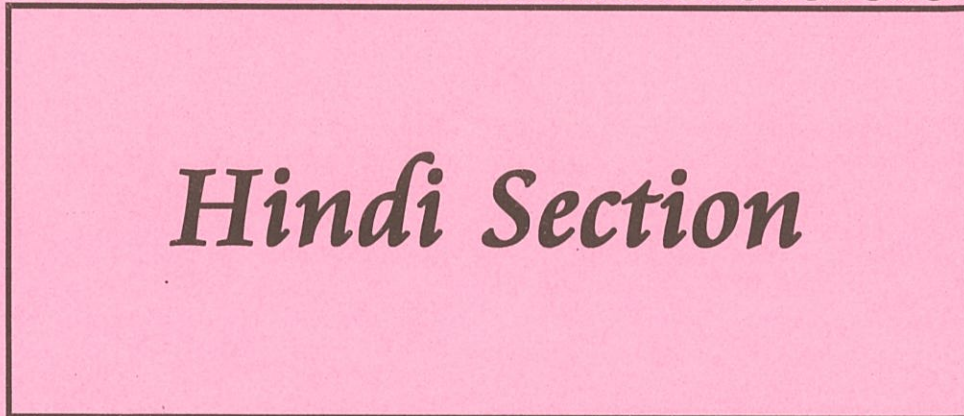
**Dr. Sushil Nagrale**  
Assistant Professor & Head  
Department of Zoology  
Achieved Best Teacher Award  
of Amravati Division Congress  
Teacher's Cell



**Dr. Pradip Deohate**  
Assistant Professor  
Department of Chemistry  
Received Award for Excellence  
in Research in 3rd South Asian  
Education Awards-2018, Hyderabad



**Dr. Rohit Agrawal**  
Assistant Professor  
Department of Physics  
Achieved 2nd prize of Poster  
Presentation in International  
Conference, Baramati, Pune



*Hindi Section*



1950

1950

Hindi Section

1950

1950

## एक छोटीसी निर्मिती

संवेदनशील मन और सकारात्मक दृष्टि से व्यक्ति के व्यक्तिमत्व का परिचय होता है. व्यक्ति के मन में जितनी समझदारी व्यापकता होती है उतना सकारात्मकता और संवेदना का स्तर ऊंचा होता है.

संवेदनशील मन बुद्धि को विचारों के प्रति प्रेरित करता है और विचारों की निर्मिती होती है. विचारों के व्यापकता का कोई अंत नहीं होता. उसके प्रचार प्रसार में धर्म और देश की सीमाएं भी बाधाये नहीं पहुँचाती. इतनाही नहीं हर धर्म और देश सृजनात्मक विचारों से ही अपना रचनात्मक विकास कर पाते हैं. मित्र के समान शत्रु भी मौलिक विचारों को अपनाते हैं. भाषा विचारों का अभिन्न अंग होता है, प्रतिभासंपन्न शब्द विचारों को गहनता प्रदान करते हैं तो अलंकृत शब्द उसके सौंदर्य में निखार लाते हैं तथा विचारों के मूल्यों को जानकर देश विदेश की अनेक भाषाएँ उसे व्यापक बनाने में सम्मिलित होती है.

परिपूर्ण विचार सबसे बड़ी और चिरकाल टिकने वाली संपत्ति होती है. कहते हैं एक साल की बिदागी चाहिए तो अनाज की उपज करो, सौ साल की बिदागी के लिए लोगों की उपज करो पर हजारों सालों की बिदागी के लिए हमें विचारों की उपज करनी होगी. व्यक्ति के विचार और उसके प्रसार से उसका व्यक्तित्व तो विश्वव्यापी होता ही है पर उसके विचारों के लिए उसका पूरा जीवन प्रयोग का माध्यम होता है, समर्पित होता है. इसीलिए, मुझे कभी लगता है की जीवन क्या है ? तो मैं कहता हूँ "Life is nothing but an experiment to write a small book of high philosophy".

विचारों का प्रभाव बड़ा व्यापक और कार्यप्रेरित होता है, उससे रचनात्मक जीवन, समाज और राष्ट्र तथा रचनात्मक विश्व की निर्मिती होती है. लेकिन यह विश्वव्यापी निर्मिती होने के लिए नियमित कृति की आवश्यकता होती है. उस नियमित कृति के लिए हमारे सामने बहुसंख्य सामाजिक, राष्ट्रीय समस्याये उपलब्ध हैं जिसे सुलझाने पर बहुसंख्य मानव, राष्ट्र समृद्ध और सुखदाई बन जाए जिससे विश्वशान्ति को बढावा मिले, सृष्टि मंगलमय हो जाए.

व्यक्ति में सकारात्मक दृष्टि, संवेदनशील मन से विचारों का निर्माण और उसके अनुरूप कृति होती है जिससे छोटीसी निर्मिती होती है. ऐसेही "एक छोटीसी निर्मिती" डॉ. मोहम्मद युसुफ (बांग्लादेश) ने आर्थिक क्षेत्र में "बचत गट / ग्रामीण बैंक" के रूप में की है, जिसके परिणाम स्वरूप भारत के ग्रामीण क्षेत्र में महिला तथा आर्थिक सशक्तिकरण हो रहा है. बांग्लादेश और भारत में हो रहे इस क्रांतिकारी बदलाव को ध्यान में रखते हुए डॉ. मोहम्मद युसुफ (ग्रामीण बैंक) को साल २००६ का नोबेल शांति पुरस्कार मिला, उन्हें प्रणाम.

प्रा. विनोद डो. देवताळे

सहाय्यक प्राध्यापक  
रसायनशास्त्र विभाग

### गुरु

सबसे प्रथम गुरु का नाम  
उनको मेरा कोटी कोटी प्रणाम।  
हमारा सिर उनके चरणों में,  
भर देता है साहस हम में।  
गुरु की शिक्षा नहीं जाती व्यर्थ  
उनके शिक्षा देने में नहीं कोई स्वार्थ।

वह देते हैं शिक्षा अनमोल  
बनाते हैं हमें पानी जैसा निर्मल।  
शिक्षा से हमारा आगे बढना,  
उनके लिए यही रहेगी गुरुदक्षिणा।  
सभी गुरु की कृपा रहे हमपर  
यह रहेगी एक मनोकामना।

कु. अनामिका देशपांडे

बी.एस्सी. भाग-३

## जिंदगी की मशाल

सर्द हुई फिज़ा, भ्रम का कोहरा छाया है,  
ढूँढ रहा मैं आदर्श यहाँ, पर सबको भटका पाया है.  
उषःकाल होते होते, फिर घना अँधेरा छाया है,  
जिंदगी की मशाल तुझको फिरसे जलाना है.

विज्ञान के गतिचक्र में, साल हज़ारों बीत गए,  
इलेक्ट्रॉन को घूमा-घूमाकर, हम सृष्टि पर जीत गए?  
जीत अधूरी है अभी यह, सृष्टि श्रुजन और करना है,  
जिंदगी की मशाल तुझको फिरसे जलाना है.

गीता किसे सुनाएँ? अर्जुन आज नहीं है,  
गीता सुनाने वाले, वह कृष्ण भी नहीं है,  
इस देश और शहर में, माताएँ ड़र रही है,  
सीता को ढूँढने वाले, हनुमान आज नहीं है,  
जिंदगी की मशाल तुझको फिरसे जलाना है.

एक दिन की जंग से, पूर्ण क्रांति असंभव है,  
भँवर बनकर जलना सुलभ है, दीप की शिखा पर,  
अब रवुद को तिल-तिल जलाकर दीप बनाना है,  
जिंदगी की मशाल तुझको फिरसे जलाना है.

इस भ्रम-भँवर में तू भूल न जाना रवुदको,  
तू चलते जा अकेले, आदर्श रवुद को रखकर,  
बिछड़ भी जाए कारवाँ, पीछे न मुड़ना है,  
जिंदगी की मशाल तुझको फिरसे जलाना है.

प्रा. विनोद डो. देवताळे  
सहाय्यक प्राध्यापक  
रसायनशास्त्र विभाग

## शिक्षक

मातायें देती नव जीवन,  
पिता सुरक्षा करते हैं,  
लेकीन सच्ची मानवता,  
शिक्षक जीवन में भरते हैं।

सत्य न्याय के पथ पर चलना  
शिक्षक हमें बताते हैं,  
जीवन संघर्षों से लडना  
शिक्षक हमें सिखाते हैं।

ज्ञानदीप की ज्योती जला कर,  
मन अलौकिक करते हैं,  
विद्या का धन देकर शिक्षक,  
जीवन सुख से भरते हैं।

शिक्षक ईश्वर से बढ कर है,  
यह कबीर बताते हैं,  
क्योंकि शिक्षक ही भक्तों को,  
ईश्वर तक पहुँचाते हैं।

जीवन में कुछ पाना है तो  
शिक्षक का सम्मान करो  
शीश झुका कर श्रद्धा से तुम  
बच्चों उन्हें प्रणाम करो  
बच्चों उन्हें प्रणाम करो.....

कु. अनामिका देशपांडे  
बी.एस्सी. भाग-३

## नोबेल शांती पुरस्कार - एक सन्मान मदर टेरेसा के नाम

कहते हैं की दुनिया में हर कोई सिर्फ अपने लिये जीता है, पर मदर टेरेसा जैसे लोग सिर्फ दूसरों के लिये जीते हैं। मदर टेरेसा का असली नाम एग्नेस गोंझा बोयोजिनू था। अल्बेनियन भाषा में गोंझा का अर्थ फूल की कली होता है, जिसे मदर टेरेसा ने सच कर दिखाया है। मदर टेरेसा एक ऐसी महकती कली थी जिन्होंने गरिबों और असहायों की जिंदगी में प्यार की खुशबू भरी।

करुणा और सेवा की साकार मुर्ति मदर टेरेसा का जन्म २६ अगस्त १९१० को मेसीडोनिया में हुआ था। बचपन में ही मदर टेरेसा के हृदय में विराट करुणा का बिज अंकुरित हो उठा था। मात्र १८ वर्ष की उम्र में वे शिक्षा लेकर सिस्टर टेरेसा बनी थी। इस दौरान १९४८ में उन्होंने वहाँ के बच्चों को पढ़ने के लिये एक स्कूल खोला और बाद में 'मिशनरीज ऑफ चॅरिटी' की स्थापना की। सच्ची लगन और मेहनत से किया गया काम कभी निष्फल नहीं होता, यह कहावत मदर टेरेसा के लिये सच साबित हुयी। मदर टेरेसा की मिशनरी संस्था ने १९९६ तक करीब १२५ देशों में ७५५ निराश्रित गृह खोले जिससे करीबन ५ लाख लोगों की भुख मिटाई जाने लगी। १९५० में कोलकाता में मिशनरीज ऑफ चॅरिटी की स्थापना करने के बाद ४५ सालों तक गरीब, असहाय, बिमार, अनाथ और मरते हुये लोगों की मदद करनेवाली मदर टेरेसा १९७० तक अपने इन मानविय कार्यों के लिये प्रसिद्ध हो गयी।

मदर टेरेसा ने भ्रुण हत्या के विरोध में भी सारे विश्व में अपना रोष दर्शाते हुये अनाथ एवं अवैध संतानों को अपनाकर मातृत्व सुख प्रदान किया। उन्होंने फूटपाथों पर पड़े हुये रोते, सिसकते रोगी अथवा मरनासन्न असहाय व्यक्तियों को उठाया और उनको उपचार कर स्वस्थ बनाया। दुखी मानवता की सेवा ही उनके जीवन का व्रत था।

### माँ टेरेसा का भारत आगमन :

सिस्टर टेरेसा अन्य ३ सिस्टरों को लेकर ६ जनवरी १९२९ को कोलकाता पहुँची। वर्ष १९४४ में वह सेंट मैरी स्कूल की प्रिंसीपल बन गयी। रोगियों की दयनिय स्थिति देखकर वे यही पर रुक गयी और जनसेवा व्रत ले लिया।

मदर टेरेसा के इस महान कार्य को लेकर उन्हें अनेक पुरस्कार प्राप्त हुये। जिनमें शामिल थे वर्ष १९६२ में पद्मश्री पुरस्कार, वर्ष १९७९ में नोबेल शांती पुरस्कार और १९८० में भारतरत्न से सन्मानित किया गया।

लगातार गिरती सेहत की वजह से ५ सितंबर १९९७ में उनकी मौत हुयी। जब कोई बच्चा खिलखिलाकर हसता होगा, जब किसी बेसहारा को सहारा मिलता होगा, जिस आत्मियता के साथ उन्होंने भारत के दिनदुखियों की सेवा की उसके लिये देश सदैव उनका ऋणी रहेगा।

कु. अनामिका दि. देशपांडे

बी.एस्सी. भाग-३



## जीवन ज्योति

जब छाये आंगन में अंधेरा  
जब निकले चांद सवेरा  
जब निंद में रहती है दुनिया सारी  
सबसे पहले घर को संवारे दुनिया भर की नारी।

सब जन है भुके  
पेड भी रहेंगे सुके  
मरीजों की सेवा होगी मंद  
नारीयाँ अगर पुकारेगी बंद।

तुम्हीसे पत्नी, तुम्हीसे माता  
जग का तुम्हीसे हर एक नाता  
तुम्ही हो जग की पालनहार  
सन्मानित हो जग की हर एक नार

घर पे आए संकट कोई  
सबसे पहले बेटी रोई  
सामना करने आगे वही आए  
सबजन को राह दिरवाए।

में तो कहती बेटी दीपक  
में तो कहती बेटी ज्योति  
जिसने ली बेटी की जान  
उसने जगमें खोया सन्मान।

**बेटी बचाओ - बेटी पढाओ**

कु. प्रतिक्षा बनाले  
बी.एस्सी. भाग-9

## काश कोई फरिश्ता होता

काश कोई फरिश्ता होता,  
जो हर वक्त अपने पास होता  
सिर्फ खुशी नहीं  
गम में भी साथ होता...  
जिसके साथ खुशी के पल जीते  
जिसके कंधे पर सर रखकर  
खूब सारा रो देते  
वो वजह पूछे बिना  
अपने आँसु पोंछने लग जाता  
शायद उसे वजह बताना  
जरूरी ना होता  
क्योंकि वो हर वक्त अपने पास होता  
अपने साथ होता....  
काश कोई ऐसा फरिश्ता होता  
जो हमें दुख के दिनों में हौसला देता,  
कि तू मत रुक, तू मत झुक,  
मत हार अपनी हिम्मत  
खुदा ने तेरे लिए कुछ सोचा होगा  
आज नहीं तो कल  
तेरे साथ भी अच्छा ही होगा....  
सबको जरूरत होती है ऐसे फरिश्ते कि  
बस फर्क इतना है,  
कुछ अपने आप में उसे ढुंढ लेते हैं  
और कुछ  
जिंदगी भर ढुंढते रह जाते हैं.....

कु. मोनल तायडे  
बी.एस्सी. भाग-2

# चित्रबिंब



Kabaddi Team



National Sports Day - Tug of War



Taekwondo Practice



Self Defense Academy - Coaching



Judo Team



Power Lifting Team



Volleyball Team



Taekwondo Team

# चित्रबिंब



S.G.B. Amravati University, Amravati Wrestling Championship Winner Team



Physical Fitness Training Camp



Morna River Swachhata Abhiyan



Youth Festival Participants



Guidance by Hon. Devyanitai Chaudhari on occasion of 'Rubella Vaccination for Women' programme organised by Women Cell



Guidance by Mr. Vijayakant Sagar, Add.S.P., Akola on occasion of 'Women & Students safety & Safety Measures' programme organised by Women Cell



'Vachan Prerna Din' organised by Library on the occasion of Late Dr. APJ Abul Kalam Birth Anniversary



Thalassemia Awareness Workshop organised in collaboration with Akola Thalassemia Society



*English Section*



English Section

## The Nobel Prize and Nobel Laureates in Chemistry

The Nobel Prize in Chemistry is awarded annually by the Royal Swedish Academy of Sciences to the scientists in various fields of Chemistry. It is one of the five Nobel Prizes established by the Alfred Nobel's will of 1895 for extraordinary and outstanding contributions in fields of Chemistry, Physics, Literature, Peace and Physiology or Medicine. The award is administered by the Nobel Foundation and awarded by a committee that consists of five members elected by the Royal Swedish Academy of Sciences. Each recipient receives a medal, a diploma and a monetary award prize that has varied throughout the years. The first Nobel Prize in Chemistry was awarded in 1901 to Jacobus Henricus Van't Hoff, of the Netherlands.

### Facts on the Nobel Prize in Chemistry

- As of 2017, the Nobel Prize in Chemistry has been awarded 109 times to 178 Nobel Laureates of various countries.
- Frederick Sanger is the only Nobel Laureate who has been awarded the Nobel Prize in Chemistry twice in 1958 and 1980. It means total 177 individuals have received the Nobel Prize in Chemistry.
- So far 4 women have been awarded the Nobel Prize in Chemistry, Marie Sklodowska-Curie in 1911, Irene Joliot-Curie (daughter of Marie Curie and wife to Frederic Joliot) in 1935, Dorothy Hodgkin in 1964 and Ada Yonath in 2009.
- Marie Sklodowska-Curie has been awarded the Nobel Prize in Physics as well as in Chemistry in 1903 and 1911 respectively.
- Linus Pauling has been awarded the Nobel Prize in Chemistry as well as in Peace in 1954 and 1962 respectively.
- Total 63 Nobel Prizes in Chemistry have been given to one Laureate only, 23 Prizes have been shared by two Laureates and 23 Prizes have been shared between three Laureates.
- At least 25 Laureates have received the Nobel Prize in Chemistry for contributions in the field of Organic Chemistry, more than any other field of Chemistry.
- To date, the Youngest Nobel Laureate in Chemistry is Frederic Joliot, who was 35 years old when he was awarded the Nobel Prize in 1935 together with his wife Irene Joliot-Curie.
- To date, the Oldest Nobel Laureate in Chemistry is John B. Fenn, who was 85 years old when he was awarded the Nobel Prize in Chemistry in 2002.
- The Curies were the most successful Nobel Prize family. The husband Pierre Curie and the wife Marie Curie were awarded the Nobel Prize in Physics in 1903. Marie Curie herself was awarded the Nobel Prize in Chemistry in 1911. Marie and Pierre Curie's eldest daughter Irene Joliot-Curie was awarded the Nobel Prize in Chemistry in 1935 together with her husband Frederic Joliot. The younger daughter Eve Curie worked for the UNICEF and was married to Henry R. Labouisse. He accepted the Nobel Prize in Peace on behalf of UNICEF in 1965.
- The another Nobel Prize families where at least one member was awarded the Nobel Prize in Chemistry were the father Hans von Euler-Chelpin, awarded Nobel Prize in Chemistry in 1929 and

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the son Ulf von Euler, awarded Nobel Prize in Physiology or Medicine in 1970, the father Arthur Kornberg, awarded Nobel Prize in Physiology or Medicine in 1959 and the son Roger D. Kornberg, awarded Nobel Prize in Chemistry in 2006.

- Two Nobel Laureates in Chemistry, Germans Richard Kuhn in 1938 and Adolf Butenandt in 1939 were not allowed by their government to accept the prize. They would later receive a medal and diploma but not the money.
- There have been eight years 1916, 1917, 1919, 1924, 1933, 1940, 1941 and 1942 in which the Nobel Prize in Chemistry was not awarded because none of the works under consideration was found to be of the importance.

### The Nobel Laureates in Chemistry

- 1901 Jacobus Henricus van't Hoff (Netherlands)** - Discovery of the laws of chemical dynamics and osmotic pressure in solutions.
- 1902 Hermann Emil Fischer (Germany)** - Work on sugar and purine syntheses.
- 1903 Svante August Arrhenius (Sweden)** - Electrolytic theory of dissociation.
- 1904 Sir William Ramsay (UK)** - Discovery of the inert gaseous elements in air and determination of their place in the periodic system.
- 1905 Johann Friedrich Wilhelm Adolf von Baeyer (Germany)** - The advancement of organic chemistry and the chemical industry through work on organic dyes and hydroaromatic compounds.
- 1906 Henri Moissan (France)** - Investigation and isolation of the element fluorine and for electric furnace.
- 1907 Eduard Buchner (Germany)** - Biochemical researches and discovery of cell free fermentation.
- 1908 Ernest Rutherford (UK, New Zealand)** - Investigations into the disintegration of the elements and the chemistry of radioactive substances.
- 1909 Wilhelm Ostwald (Germany)** - Work on catalysis and investigations into the fundamental principles governing chemical equilibria and rates of reaction.
- 1910 Otto Wallach (Germany)** - Services to organic chemistry and the chemical industry by pioneer work in the field of alicyclic compounds.
- 1911 Maria Skłodowska-Curie (Poland, France)** - Discovery of the elements radium and polonium by the isolation of radium and the study of the nature and compounds of this remarkable element.
- 1912 Victor Grignard (France)** - Discovery of the Grignard reagent.  
**Paul Sabatier (France)** - Method of hydrogenating organic compounds in the presence of finely disintegrated metals.
- 1913 Alfred Werner (Switzerland)** - Work on the linkage of atoms in molecules, especially in inorganic chemistry.
- 1914 Theodore William Richards (US)** - Accurate determinations of the atomic weight of a large number of chemical elements.

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- 1915 **Richard Martin Willstatter (Germany)** - Researches on plant pigments, especially chlorophyll.
- 1918 **Fritz Haber (Germany)** - Synthesis of ammonia from its elements.
- 1920 **Walther Hermann Nernst (Germany)** - Work in thermochemistry.
- 1921 **Frederick Soddy (UK)** - Contributions to our knowledge of the chemistry of radioactive substances and investigations into the origin and nature of isotopes.
- 1922 **Francis William Aston (UK)** - Discovery by means of his mass spectrograph of isotopes in a large number of non-radioactive elements and enunciation of the whole-number rule.
- 1923 **Fritz Pregl (Austria)** - Invention of the method of micro-analysis of organic substances.
- 1925 **Richard Adolf Zsigmondy (Germany, Hungary)** - Demonstration of the heterogeneous nature of colloid solutions and for the methods used.
- 1926 **The (Theodor) Svedberg (Sweden)** - Work on disperse systems.
- 1927 **Heinrich Otto Wieland (Germany)** - Investigations of the constitution of the bile acids and related substances.
- 1928 **Adolf Otto Reinhold Windaus (Germany)** - Research into the constitution of the sterols and their connection with the vitamins.
- 1929 **Arthur Harden (UK)** and **Hans Karl August Simon von Euler-Chelpin (Sweden)** - Investigations on the fermentation of sugar and fermentative enzymes.
- 1930 **Hans Fischer (Germany)** - Researches into the constitution of haemin and chlorophyll, especially for synthesis of haemin.
- 1931 **Carl Bosch (Germany)** and **Friedrich Bergius (Germany)** - Contributions to the invention and development of chemical high pressure methods.
- 1932 **Irving Langmuir (US)** - Discoveries and investigations in surface chemistry.
- 1934 **Harold Clayton Urey (US)** - Discovery of heavy hydrogen.
- 1935 **Frederic Joliot (France)** and **Irene Joliot-Curie (France)** - Synthesis of new radioactive elements.
- 1936 **Petrus (Peter) Josephus Wilhelmus Debye (Netherlands)** - Work on molecular structure through investigations on dipole moments and the diffraction of X-rays and electrons in gases.
- 1937 **Walter Norman Haworth (UK)** - Investigations on carbohydrates and vitamin C.  
**Paul Karrer (Switzerland)** - Investigations on carotenoids, flavins and vitamins A and B2.
- 1938 **Richard Kuhn (Germany)** - Work on carotenoids and vitamins.
- 1939 **Adolf Friedrich Johann Butenandt (Germany)** - Work on sex hormones.  
**Leopold Ruzicka (Croatia, Switzerland)** - Work on polymethylenes and higher terpenes.
- 1943 **George de Hevesy (Germany)** - Work on the use of isotopes as tracers in the study of chemical processes.
- 1944 **Otto Hahn (Germany)** - Discovery of the fission of heavy nuclei.



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- 1945 **Artturi Ilmari Virtanen (Finland)** - Research and inventions in agricultural and nutrition chemistry, especially for fodder preservation method.
- 1946 **James Batcheller Sumner (US)** - Discovery that enzymes can be crystallized.  
**John Howard Northrop (US)** and **Wendell Meredith Stanley (US)** - Preparation of enzymes and virus proteins in a pure form.
- 1947 **Sir Robert Robinson (UK)** - Investigations on plant products of biological importance, especially the alkaloids.
- 1948 **Arne Wilhelm Kaurin Tiselius (Sweden)** - Research on electrophoresis and adsorption analysis, especially for discoveries concerning the complex nature of the serum proteins.
- 1949 **William Francis Giauque (US)** - Contributions in the field of chemical thermodynamics, particularly concerning the behaviour of substances at extremely low temperatures.
- 1950 **Otto Paul Hermann Diels (West Germany)** and **Kurt Alder (West Germany)** - Discovery and development of the diene synthesis.
- 1951 **Edwin Mattison McMillan (US)** and **Glenn Theodore Seaborg (US)** - Discoveries in the chemistry of transuranium elements.
- 1952 **Archer John Porter Martin (UK)** and **Richard Laurence Millington Synge (UK)** - Invention of partition chromatography.
- 1953 **Hermann Staudinger (West Germany)** - Discoveries in the field of macromolecular chemistry.
- 1954 **Linus Pauling (US)** - Research into the nature of the chemical bond and its application to the elucidation of the structure of complex substances.
- 1955 **Vincent du Vigneaud (US)** - Work on biochemically important sulphur compounds, especially for the first synthesis of a polypeptide hormone.
- 1956 **Sir Cyril N. Hinshelwood (UK)** and **Nikolay N. Semenov (Soviet Union)** - Researches into the mechanism of chemical reactions.
- 1957 **Lord (Alexander R.) Todd (UK)** - Work on nucleotides and nucleotide co-enzymes.
- 1958 **Frederick Sanger (UK)** - Work on the structure of proteins, especially that of insulin.
- 1959 **Jaroslav Heyrovsky (Czechoslovakia)** - Discovery and development of the polarographic methods of analysis.
- 1960 **Willard Frank Libby (US)** - Method to use carbon-14 for age determination in archaeology, geology, geophysics and other branches of science.
- 1961 **Melvin Calvin (US)** - Research on the carbon dioxide assimilation in plants.
- 1962 **Max Ferdinand Perutz (UK)** and **John Cowdery Kendrew (UK)** - Studies of the structures of globular proteins.
- 1963 **Karl Ziegler (West Germany)** and **Giulio Natta (Italy)** - Discoveries in the field of the chemistry and technology of high polymers.
- 1964 **Dorothy Crowfoot Hodgkin (UK)** - Determinations by X-ray techniques of the structures of important biochemical substances.

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- 1965 **Robert Burns Woodward (US)** - Outstanding achievements in the art of organic synthesis.
- 1966 **Robert S. Mulliken (US)** - Fundamental work concerning chemical bonds and the electronic structure of molecules by the molecular orbital method.
- 1967 **Manfred Eigen (West Germany), Ronald George Wreyford Norrish (UK) and George Porter (UK)** - Studies of extremely fast chemical reactions effected by disturbing the equilibrium by means of very short pulses of energy.
- 1968 **Lars Onsager (US)** - Discovery of the reciprocal relations bearing his name which are fundamental for the thermodynamics of irreversible processes.
- 1969 **Derek H. R. Barton (UK) and Odd Hassel (Norway)** - Contributions to the development of the concept of conformation and its application in chemistry.
- 1970 **Luis F. Leloir (Argentina)** - Discovery of sugar nucleotides and their role in the biosynthesis of carbohydrates.
- 1971 **Gerhard Herzberg (Canada, West Germany)** - Contributions to the knowledge of electronic structure and geometry of molecules, particularly free radicals.
- 1972 **Christian B. Anfinsen (US)** - Work on ribonuclease, especially concerning the connection between the amino acid sequence and the biologically active conformation.  
**Stanford Moore (US) and William H. Stein (US)** - Contribution to the understanding of the connection between chemical structure and catalytic activity of the active centre of the ribonuclease molecule.
- 1973 **Ernst Otto Fischer (West Germany) and Geoffrey Wilkinson (UK)** - Pioneering work on the chemistry of the organometallic, so called sandwich compounds.
- 1974 **Paul J. Flory (US)** - Fundamental work, both theoretical and experimental in the physical chemistry of macromolecules.
- 1975 **John Warcup Cornforth (Australia, UK)** - Work on the stereochemistry of enzyme-catalyzed reactions.  
**Vladimir Prelog (Yugoslavia, Switzerland)** - Research into the stereochemistry of organic molecules and reactions.
- 1976 **William N. Lipscomb (US)** - Studies on the structure of boranes illuminating problems of chemical bonding.
- 1977 **Ilya Prigogine (Belgium)** - Contributions to non-equilibrium thermodynamics, particularly the theory of dissipative structures.
- 1978 **Peter D. Mitchell (UK)** - Contribution to the understanding of biological energy transfer through the formulation of the chemiosmotic theory.
- 1979 **Herbert C. Brown (US) and Georg Wittig (West Germany)** - Development of the use of boron and phosphorus containing compounds respectively into important reagents in organic synthesis.
- 1980 **Paul Berg (US)** - Fundamental studies of the biochemistry of nucleic acids with particular regard to recombinant-DNA.  
**Walter Gilbert (US) and Frederick Sanger (UK)** - Contributions concerning the determination

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of base sequences in nucleic acids.

- 1981 **Kenichi Fukui (Japan)** and **Roald Hoffmann (US, Poland)** - Theories developed concerning the course of chemical reactions.
- 1982 **Aaron Klug (UK)** - Development of crystallographic electron microscopy and structural elucidation of biologically important nucleic acid-protein complexes.
- 1983 **Henry Taube (US)** - Work on the mechanisms of electron transfer reactions, especially in metal complexes.
- 1984 **Robert Bruce Merrifield (US)** - Development of methodology for chemical synthesis on a solid matrix.
- 1985 **Herbert A. Hauptman (US)** and **Jerome Karle (US)** - Outstanding achievements in developing direct methods for the determination of crystal structures.
- 1986 **Dudley R. Herschbach (US)**, **Yuan T. Lee (US, Taiwan)** and **John C. Polanyi (Canada, Hungary)** - Contributions concerning the dynamics of chemical elementary processes.
- 1987 **Donald J. Cram (US)**, **Jean-Marie Lehn (France)** and **Charles J. Pedersen (US)** - Development and use of molecules with structure-specific interactions of high selectivity.
- 1988 **Johann Deisenhofer (West Germany)**, **Robert Huber (West Germany)** and **Hartmut Michel (West Germany)** - Determination of the three-dimensional structure of a photosynthetic reaction centre.
- 1989 **Sidney Altman (Canada, US)** and **Thomas Cech (US)** - Discovery of catalytic properties of RNA.
- 1990 **Elias James Corey (US)** - Development of the theory and methodology of organic synthesis.
- 1991 **Richard R. Ernst (Switzerland)** - Contributions to the development of the methodology of high resolution nuclear magnetic resonance (NMR) spectroscopy.
- 1992 **Rudolph A. Marcus (US, Canada)** - Contributions to the theory of electron transfer reactions in chemical systems.
- 1993 **Kary B. Mullis (US)** - Contributions to the developments of methods within DNA-based chemistry and invention of the polymerase chain reaction (PCR) method.  
**Michael Smith (Canada)** - Contributions to the developments of methods within DNA-based chemistry and fundamental contributions to the establishment of oligonucleotide-based, site-directed mutagenesis and its development for protein studies.
- 1994 **George A. Olah (US, Hungary)** - Contribution to carbocation chemistry.
- 1995 **Paul J. Crutzen (Netherlands)**, **Mario J. Molina (Mexico)** and **F. Sherwood Rowland (US)** - Work in atmospheric chemistry, particularly concerning the formation and decomposition of ozone.
- 1996 **Robert F. Curl Jr. (US)**, **Sir Harold W. Kroto (UK)** and **Richard E. Smalley (US)** - Discovery of fullerenes.
- 1997 **Paul D. Boyer (US)** and **John E. Walker (UK)** - Elucidation of the enzymatic mechanism underlying the synthesis of adenosine triphosphate (ATP).  
**Jens C. Skou (Denmark)** - First discovery of an ion-transporting enzyme,  $\text{Na}^+$ ,  $\text{K}^+$  ATPase.

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- 1998 **Walter Kohn (US)** - Development of the density-functional theory.  
**John A. Pople (UK)** - Development of computational methods in quantum chemistry.
- 1999 **Ahmed Zewail (US, Egypt)** - Studies of the transition states of chemical reactions using femtosecond spectroscopy.
- 2000 **Alan J. Heeger (US), Alan G. MacDiarmid (US, New Zealand) and Hideki Shirakawa (Japan)**- Discovery and development of conductive polymers.
- 2001 **William S. Knowles (US) and Ryoji Noyori (Japan)** - Work on chirally catalysed hydrogenation reactions.  
**K. Barry Sharpless (US)** - Work on chirally catalysed oxidation reactions.
- 2002 **John B. Fenn (US) and Koichi Tanaka (Japan)** - Development of methods for identification and structure analyses of biological macromolecules and development of soft desorption ionisation methods for mass spectrometric analyses of biological macromolecules.  
**Kurt Wuthrich (Switzerland)** - Development of methods for identification and structure analyses of biological macromolecules and development of nuclear magnetic resonance spectroscopy for determining the three-dimensional structure of biological macromolecules in solution.
- 2003 **Peter Agre (US)** - Discoveries concerning channels in cell membranes and discovery of water channels.  
**Roderick MacKinnon (US)** - Discoveries concerning channels in cell membranes and structural and mechanistic studies of ion channels.
- 2004 **Aaron Ciechanover (Israel), Avram Hershko (Israel) and Irwin Rose (US)** - Discovery of ubiquitin-mediated protein degradation.
- 2005 **Yves Chauvin (France), Robert H. Grubbs (US) and Richard R. Schrock (US)** - Development of the metathesis method in organic synthesis.
- 2006 **Roger D. Kornberg (US)** - Studies of the molecular basis of eukaryotic transcription.
- 2007 **Gerhard Ertl (Germany)** - Studies of chemical processes on solid surfaces.
- 2008 **Osamu Shimomura (Japan), Martin Chalfie (US) and Roger Y. Tsien (US)** - Discovery and development of the green fluorescent protein GFP.
- 2009 **Venkatraman Ramakrishnan (US, India, UK), Thomas A. Steitz (US) and Ada E. Yonath (Israel)** - Studies of the structure and function of the ribosome.
- 2010 **Richard F. Heck (US), Ei-ichi Negishi (Japan) and Akira Suzuki (Japan)** - Palladium catalyzed cross couplings in organic synthesis.
- 2011 **Dan Shechtman (Israel)** - Discovery of quasicrystals.
- 2012 **Robert Lefkowitz (US) and Brian Kobilka (US)** - Studies of G-protein-coupled receptors.
- 2013 **Martin Karplus (US, Austria), Michael Levitt (US, UK, Israel) and Arieh Warshel (US, Israel)**- Development of multiscale models for complex chemical systems.
- 2014 **Eric Betzig (US), Stefan W. Hell (Germany, Romania) and William E. Moerner (US)** - Development of super-resolved fluorescence microscopy.

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- 2015 Tomas Lindahl (Sweden, UK), Paul L. Modrich (US) and Aziz Sancar (US, Turkey) - Mechanistic studies of DNA repair.
- 2016 Jean-Pierre Sauvage (France), Fraser Stoddart (UK, US) and Ben Feringa (Netherlands) - Design and synthesis of molecular machines.
- 2017 Jacques Dubochet (Switzerland), Joachim Frank (Germany, US) and Richard Henderson (UK) - Developing cryo-electron microscopy for the high-resolution structure determination of biomolecules in solution.

The Nobel Prizes in Chemistry reveals that, the development of Chemistry includes breakthroughs in all of its branches with a certain dominance for progress in Physical Chemistry and in several areas of Organic Chemistry as well as in Biochemistry. Of course the borders between different areas are diffuse. Chemistry has a position in the centre of sciences, bordering onto physics which provides its theoretical foundation on one side and onto biology on other side in which living organisms being the most complex of all chemical systems.

**Dr. Pradip P. Deohate**

Assistant Professor  
Department of Chemistry

### *Nothing remains the same*

*During this short span of life,  
Nothing remains the same  
Belief grows into doubt  
Whispers become shouts  
Laughter turns to tears  
And comfort is replaced by fear  
Good times become a memory  
pride leads one to misery  
Trust makes way for betrayal  
Acceptance changes to denial  
Innocent become tainted  
Love makes way for hatred  
Once rich turn to poverty  
carnival leads to funeral  
Sacrifice grows into selfishness  
Sensitive fall pray to numbness  
wits fall victim to stupidity  
Fame turns to notority*

**Mr. Arun B. Khedkar**  
Assistant Professor in English  
Department of Languages

## Nobel Laureate - Marie Curie

Marie Curie was born on 7<sup>th</sup> November in 1867 at Warsaw, Poland. Her birth name was Maria Sklodowska but her family called her Manya. Her parents were teachers. Maria was the youngest among five children. Her dad taught Maths and Physics, and her mother was headmistress at a girl's school. Maria was taught to read and write early. She was a very bright child and did well in school. She had a sharp memory and worked hard on her studies.

After graduating from high school, Marie wanted to attend a university but in Poland the university was for men. However, there was a famous university in Paris, (France) called the Sorbonne that women could attend. Marie did not have the money to go there but agreed to work to help pay for her sister (Bronislawa) to go to school in France, If she would help Marie after her graduate. It took six years, but after her sister graduated and became a doctor. Marie moved to France and entered the Sorbonne University. During the six year Marie had read a lot of books on maths and physics. She knew, she wanted to become a scientist.

Marie arrived in France in 1891, In order to fit in she changed her name from Manya to Marie. Marie lived the life of poor college student, but she loved every minute of it. She was learning so much. After three years she earned her degree in Physics

In 1894 Marie met Pierre Curie, like Marie. He was a scientist they got married. Marie became fascinated by the rays that were recently discovered by scientist Wilhelm Roentgen and Henri Becquerel. Roentgen discovered X-ray and Becquerel had found rays given off by an element called uranium. Marie began to do experiments. One day Marie was examining a material called Pitchblende. She expected there to be a few rays from the uranium in Pitchblende, but instead Marie found a lots of rays. She soon realized that there must be a new undiscovered element in Pitchblende.

Marie and her husband spent many hours in the science lab investigating Pitchblende and new element. They gradually figured out that there were two new elements in Pitchblende. They had discovered two new element for Periodic Table.

Marie named one of the elements Polonium after her homeland Poland. She named the other Radium because it gave off strong rays. The Curie came up with the term "Radioactivity" to describe elements that emitted strong rays. In 1903 the Nobel Prize in Physics was awarded to Marie and Pierre Curie as well as Henri Becquerel for their work in Radiation. Marie became the first women to have been awarded with such a prize.

In 1911 Marie won the Nobel Prize in Chemistry for Discovering the two elements polonium and radium. She was the first person to be awarded two nobel prizes. Marie became very famous scientist came from around the world to study radioactivity with Pierre. Soon Doctors found that radiology could help in curing cancer.

Marie Curie was the first woman to win a Nobel prize, the first person to win two Nobel Prizes, the only woman to win in two fields, and the only person to win in multiple sciences.

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Awards that she received include :

- Nobel Prize in Physics (1903, with her husband Pierre Curie and Henri Becquerel)
- Davy Medal (1903, with Pierre)
- Matteucci Medal (1904, with Pierre)
- Actonian Prize (1907)
- Elliott Cresson Medal (1909)
- Nobel Prize in Chemistry (1911)
- Franklin Medal of the American Philosophical Society (1921)

When World War I started Marie came to know that doctors could use X-Ray to help, to determine what was wrong with an injured soldiers. There were not enough X-Ray machines for every hospital, So X-ray machine could move from hostel to hospital in a truck. Marie even helped to train people to operate the machines.

Marie died on 4<sup>th</sup> July 1934. She died of overexposure to radiations, Both from her experiments and of her work with X-ray machines. Today there are lots of safety measures to keep scientist from getting overexposed to the rays.

**Dr. Kavita M. Heda**  
Assistant Professor  
Department of Chemistry

## ACM A.M. Turing Award

(Tagline "Nobel Prize in Computing")

Tim Berners-Lee Inventor of World Wide Web (WWW)

Alfred Nobel's last will of 1895 only included five prizes, covering outstanding achievements who confer the 'greatest benefit on mankind' in the fields of Chemistry, Physics, Literature, Peace and Physiology or Medicine. Several fields of human cultural and scientific development are not included in the list of Nobel Prizes.

The ACM A.M. Turing Award is an annual prize given by the Association for Computing Machinery (ACM) to an individual selected for contributions "of lasting and major technical importance to the computer field". The Turing Award is generally recognized as the highest distinction in computer science and the "Nobel Prize of Computing".

The award is named after Alan Turing, a British mathematician and reader in mathematics at the University of Manchester. Turing is often credited as being the key founder of theoretical computer science and artificial intelligence, with financial support provided by Intel and Google.

In 2017, we celebrated 50 years of the ACM A.M. Turing Award, known simply as the Turing Award. The list of Turing Award winners starting from Alan Perlis in 1966, 'for his influence in the area of advanced computer programming techniques and compiler construction,' to Sir Tim Berners-Lee in 2016, "for inventing the World Wide Web, the first Web browser, and the fundamental protocols and algorithms allowing the Web to scale," offers a bird-eye view of the highlights of computing science and technology over the past 50 years. Justifiably, the Turing Award is often accompanied by the tagline "The Nobel Prize in Computing."

In 2017 Tim Berner-Lee Awarded 2016 ACM A.M. Turing Prize, he is the inventor of the World Wide Web and one of Time Magazine's 100 Most Important People of the 20th Century', Sir Tim Berners-Lee is a scientist and academic whose visionary and innovative work has transformed almost every aspect of our lives.

ACM named Sir Tim Berners-Lee, a Professor at Massachusetts Institute of Technology and the University of Oxford, the recipient of the 2016 ACM A.M. Turing Award. Berners-Lee was cited for inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale. Considered one of the most influential computing innovations in history, the World Wide Web is the primary tool used by billions of people every day to communicate, access information, engage in commerce, and perform many other important activities.

Sir Tim Berners-Lee invented the World Wide Web in 1989. He is the Director of the World Wide Web Consortium (W3C), a Web standards organization founded in 1994 which develops interoperable technologies (specifications, guidelines, software, and tools) to lead the Web to its full potential. He is a Director of the World Wide Web Foundation which was launched in 2009 to coordinate efforts to further the potential of the Web to benefit humanity.



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A graduate of Oxford University, Sir Tim invented the Web while at CERN, the European Particle Physics Laboratory, in 1989. He wrote the first web client and server in 1990. His specifications of URIs, HTTP and HTML were refined as Web technology spread.

He is the Founders Professor of Engineering in the School of Engineering with a joint appointment in the Department of Electrical Engineering and Computer Science at the Laboratory for Computer Science and Artificial Intelligence (CSAIL) at the Massachusetts Institute of Technology (MIT) where he co-leads the Decentralized Information Group (DIG). He is also a Professor in the Computer Science Department at the University of Oxford, UK. He is President of and founded the Open Data Institute in London.

Tim had written the three fundamental technologies that remain the foundation of today's web (and which is parts of web browser) :

- HTML : Hypertext Markup Language. The markup (formatting) language for the web.
- URI : Uniform Resource Identifier. A kind of 'address' that is unique and used to identify to each resource on the web. It is also commonly called a URL.
- HTTP : Hypertext Transfer Protocol. Allows for the retrieval of linked resources from across the web.

On 4th April 2017, Sir Tim was awarded the ACM A.M. Turing Prize for inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale.

**Mr. Ram B. Ghayalkar**

Assistant Professor

Department of Computer Science

### Be a genuine

I love genuine people  
My thirst for a genuine people is so hard !!  
I want few ones, but true ones....  
I want is the best souls ....  
Not the best house, car and money....  
I want to make memories,  
which are more worth then dollars and money....  
So listen honey,  
Don't be fussy,  
The only thing I suggest you  
Be a genuine person,  
And keep everyone happy  
Because some people and relationships are never  
comparable to cars and money....

**Ms. Insiyah D. Vora**  
M.Sc.-II (Mathematics)

### Dreams

Take your dreams seriously  
Move towards your goals consciously  
There may be thousands of distractions....  
Which will lead to depression  
Know that, reaching towards your goals,  
And fulfilling them,  
Will give you biggest happiness  
Sitting idle and lost, is the loser's situation....  
Only by coming out of it,  
Will lead to relaxation....  
Be on track and keep on your motivations....  
This is the only way to dreams aspirations.

**Ms. Insiyah D. Vora**  
M.Sc.-II (Mathematics)

## Rabindranath Tagore, A Nobel Laureate

Rabindranath Tagore stands out unique amongst all the Indian Literary figures of all time. He is remarkable for his originality, simplicity and spontaneity of ideas. One of the most important features of his writing is his spirituality, be it poetry, play, short story or anything that he has handled spiritual note with utmost care.

Tagore was a versatile genius, he was a poet playwright, writer, educationist, novelist, scriptwriter and musician too. He was awarded with Nobel Prize in literature for his 'Geetanjali' in 1913. He was the first non-European to win the Nobel Prize in Literature. The key event was Tagore's meeting with W.B. Yeats (who also got Nobel Prize in 1923). Tagore's spiritual message and respect for nature struck a chord in a pre-war Europe. Geetanjali begins thus -

"Thou hast made me endless,  
Such is thy pleasure, This fragile vessel thou,  
emptiest again & again and fillest it  
ever with fresh life".

Many verses of Geetanjali are beautiful prayers written after a gut-wrenchingly painful and the most tragic period in Tagore's life, during which he lost his father, wife, son and daughter one after the other. His unshaken devotion to god is given expression in the verses which Tagore named as 'Song Offerings'.

Tagore was immensely patriotic, his love for his own country is revealed when he prays for the emancipation of his country.

"Where the mind is without fear  
and the head is held high;  
Where knowledge is free".

and also,

"Where the clear stream of reason  
has not lost its way into the dreary  
desert sand of dead habit."

Tagore's insistence upon spiritualism in our lives is tremendous. According to him, man is progressing leaps and bounds but his physical or mental progress is worthless if they don't accept spiritual ideas.

"he who has the knowledge,  
has the responsibility to  
impart it to the students".

Recommending the name of Rabindranath Tagore T.S. Moore write to the secretary of the Nobel committee of the Swedish Academy in Stockholm as

Sir,

"As a fellow of the Royal Society of U.K. I have the honour to propose the name of Rabindranath Tagore as a person qualified, in my opinion, to be awarded the Nobel Prize".

**Mr. Arun B. Khedkar**  
Assistant Professor in English  
Department of Languages

## *The Nobel Prize Winner - Mother Teresa*

We need to find god & he cannot be found in noise & restlessness. God is the friend of silence. See how nature - trees, flowers, grass-grows in silence, see the stars, the moon and the sun, how they move in silence.... We need silence to be able to touch souls.

Be faithful in small things because it is in them that your strength lies it's one of the greatest example is "The Nobel prize winner & India's mother 'The Mother Teresa'.

Mother Teresa, known in the Catholic Church as Saint Teresa of Calcutta, was an Albanian - Indian, Roman Catholic nun and missionary. She was born in Skopje, then part of the Kosovo Viloyet of the Ottoman Empire. After living in Macedonia for eighteen years she moved to Ireland and then to India, where she lived for most of her life.

"Nothing is impossible" its greater example is Mother Teresa. In 1950 Teresa founded the Missionaries of Charity, a Roman Catholic religious congregation which had over 4,500 sisters & active in 133 countries in 2012. The congregations manages homes for people lying of HIV/AIDS leprosy and tuberculosis soup kitchens; dispensaries and mobile clinics; children's and family - counselling programmes; orphanages and schools. Members, who take vows of chastity, poverty and obedience, also profess a fourth vow : to give wholehearted free service to the poorest of the poor."

Teresa received a number of honours, including the 1967 Romon Magsaysay Peace Prize and 1979 Nobel Peace Prize. She was canonised on 4th Sept. 2016, and the anniversary of her death is her feast day.

A controversial figure during her life and after her death, Teresa was admired by many for her charitable work. She was praised and criticised for poor conditions in her houses for the dying. Her authorised biography was written by Navin Chawla and published in 1992, and she has been the subject of films and other books. On Sept. 6, 2017 Teresa was named co-pation of the Roman Catholic Archdiocese of Calcutta, alongside St. Francis Xavier.

### **Early Life :**

Teresa was born Anjeze Gonxhe Bojaxhiu Anjeze is a cognate of "Agnes". Gonune means "rosebud" or "little flower" in on 26 Aug. 1910 into a Kosovar Albanian family in Shopje. Ottoman Empire she was baptized in skopje, the day after her birth, she later considered 27 Aug. the day she was baptised, her 'true birthday'.

She was the youngest child of Nikolie and Drangfile Bojaxhu. Her father who was involved in Albanian - community politics in Macedonia, died in 1919 when she was eight years old. He may have been form Prizven, kosovo and her mother may have been from a village near Gjakova.

According to a biography by Joan Giraff Clucas, during her early years, Teresa was fascinated by stories of the lives of missionaries and their services in Bengal; by age 12 she was convinced that she should commit herself to religious life. Her resolve strengthened on 15 August 1928 as she prayed at the shrine of the Black Madonna of Vitina - Letnice, where she often went on pilgrimages.

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Teresa left home in 1928 at age 18 to join the sisters of Loreto of Loreto Abbey in Rathfamham, Ireland to learn English with the view of becoming a missionary. English was the language of instruction of the sisters of Loreto in India. She never saw her mother or her sister again. Her family lived in Skopje until 1934, when they moved to Tirana.

She arrived in India in 1929 and began her novitiate in Darjeeling in the lower Himalayas where she learnt Bengali and taught at St. Teresa's School near her convent. Teresa took her first religious vows on 24 May 1931. She chose to be named after Therese de Lisieux, the patron saint of missionaries because a nun in the convent had already chosen that name, Agnes opted for its Spanish spelling.

Teresa took her solemn vows on 14 May 1937 while she was a teacher at the Loreto convent school in Entally, eastern Calcutta. She served there for nearly twenty years and was appointed its headmistress in 1944. Although Teresa enjoyed teaching at the school, she was increasingly disturbed by the poverty surrounding her in Calcutta. The Bengal famine of 1943 brought misery and death to the city, and the August 1946 Direct Action Day began a period of Muslim-Hindu violence.

### **Missionaries of Charity :**

On 10 Sept. 1946, Teresa experienced what she later described as 'the call within the call' when she travelled by train to the Loreto convent in Darjeeling from Calcutta for her annual retreat. "I was to leave the convent and help the poor while living among them. It was an order. To fail would have been to break the faith. Joseph Longford later wrote, "Though no one knew it at the time, sister Teresa had just become Mother Teresa.

She began missionary work with the poor in 1948, replacing her traditional Loreto habit with a simple white cotton sari with a blue border. Teresa adopted Indian citizenship, spent several months in Patna to receive basic medical training at Holy Family Hospital and ventured into the slums. She founded a school in Motijhil, Kolkata, before she began tending to the poor and hungry. At the beginning of 1949 Teresa was joined in her effort by a group of young women and she laid the foundation for a new religious community helping the poorest among the poor".

Her efforts quickly caught the attention of Indian officials, including the prime minister. Teresa wrote in her diary that her first year was fraught with difficulty. With no income she begged for food and supplies and experienced doubt, loneliness and the temptation to return to the comfort of convent life during these early months.

Our lords wants me to be a free nun covered with the poverty of the cross. Today, I learned a good lesson. The poverty of the poor must be so hard for them. While looking for a home I walked and walked till my arms and legs ached. I thought how much they must ache in body and soul, looking for a home, food and health. Then, the comfort of Loreto came to tempt me. "You have only to say the word and all that will be yours again", the Tempter kept on saying ..... of free choice, my God, and out of love for you, I desire to remain and do whatever be your Holy will in my regard. I did not let a single tear come.

The Missionaries of Charity Brothers was founded in 1963 and a contemplative branch of the sisters followed in 1976 lay Catholics and non-Catholics were enrolled in the co-workers of Mother Teresa,

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the sick and suffering co-workers, and the lay Missionaries of charity. Responding to requests by many priests in 1981 Mother Teresa founded the Corpus Christi Movement for Priests and the Missionaries of charity fathers in 1984 to combine the vocational aims of the Missionaries of charity fathers in 1984 to combine the vocational aims of the Missionaries of charity with the resources of the priesthood. By 2007 the Missionaries of charity numbered about 450 brothers and 5,000 sisters worldwide operating 600 missions, schools and shelters in 120 countries.

### International Charity :

Teresa said "By blood I am Albanian, by citizenship an Indian, by faith I am a catholic nun. As to my calling, I belong to the world. As to my heart, I belong entirely to the heart of Jesus fluent in five languages - Bengali, Albanian, Serbian, English and Hindi. She made occasional trips outside India for humanitarian reasons.

In 1982 at the height of the siege of Beirut, Teresa rescued 37 children trapped in a frontline hospital by brokering a temporary ceasefire between the Israeli army and Palestinian guenillas. Accompanied by Red Cross workers, she travelled through the war zone to the hospital to evacuate the young patients.

When Eastern Europe experienced increased openness in the late 1980s, Teresa expanded her efforts to communist countries which had rejected the Missionaries of Charity. She began dozens of projects, undeterred by criticism of her stands against abortion and divorce : "No matter who says what, you should accept it with a smile and do your own work". She visited Armenia after the 1988 earthquake and met with Nikolai Ryzhkov, Chairman of the Council of Ministers.

Teresa travelled to assist the hungry in Ethiopia, radiation victims of Chernobyl and earthquake victims in Armenia. In 1991 she returned to Albania for the first time, opening a Missionaries of Charity Brothers home in Tirana. By 1996, Teresa operated 517 missions in over 100 countries. Her Missionaries of charity grew from twelve to thousands serving the "poorest of the poor" in 450 centres worldwide. The first Missionaries of charity home in the united states was established in the South Bronx area of New York city and by 1984 the congregation operated establishments throughout the country.

### Declining health and death :

Teresa had a heart attack in Rome in 1983 while she was visiting Pope John Paul II following a second attack in 1989, she received an artificial pacemaker. In 1991, after a bout of pneumonia in Mexico, she had additional heart problems. Although Teresa offered to resign as head of the Missionaries of the charity, in a secret ballot the sisters of the congregation voted for her to stay and she agreed to continue.

Teresa lay in repose in St. Thomas, Calcutta, for a week before her funeral. She received a state funeral from the Indian government in gratitude for her service to the poor of all religions in the country. Teresa's death was mourned in the secular and religious communities. Prime Minister of Pakistan Nawaz Sharif called her "a rare and unique individual who lived long for higher purposes. Her life-long devotion to the care of the poor, the sick and the disadvantaged was one of the sick and the highest

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examples of service to our humanity. According to former UN Secretary General Javier Perez de Cuellar She is the united Nations.... She is peace in the world.

### Recognition and reception :

Teresa was first recognised by the Indian government more than a third of century earlier, receiving the Padmashri in 1962 and the Jawaharlal Nehru Award for international understanding in 1969. She later received other Indian awards including the Bharat Ratna in 1980. Teresa's official biography, by Navin Chawla was published in 1992. In Kolkata, she is worshipped as a goddess by some Hindus.

During her lifetime Teresa was among the top 10 women in the annual Gallup's most admired and women poll 18 times. Finishing first several times in the 1980s. In 1999 she headed Gallup's list of most widely admired people of the 20th century outpolling all other volunteered answers by a wide margin and was first in all major demographic categories except the very young.

### Criticism :

According to a paper by Canadian academics Serge Larivee, Genevieve Chenard and Carole Senechal, Teresa's clinics received millions of dollars in donations but lacked medical care, systematic diagnosis, necessary nutrition and sufficient analgesics for those in pain. "Mother Teresa believed the sick must suffer like Christ on the cross. It was said that the additional money might have transformed the health of the city's poor by creating advanced palliative care facilities. Abortion rights groups criticised Teresa's stance on abortion.

### Spiritual Life :

Analysing her deeds and achievements, Pope John Paul II said "Where did Mother Teresa find the strength and perseverance to place herself completely at the service of others ? She found it in prayer and in the silent contemplation of Jesus Christ, his Holy Face, his Sacred Heart. Privately Teresa experienced doubts struggle in her religious beliefs which lasted nearly 50 years; according to her postulator, Brian Kolodiejchuk, "She felt no presence of God whatsoever in her heart or in the eucharist". God's existence and pain over her lack of faith.

Where is my faith ? Even deep down.... there is nothing but emptiness and darkness.... If there be God please forgive me. When I try to raise my thoughts to Heaven, there is such convicting emptiness that those very thoughts return like sharp knives and hurt my very soul.

A Nobel peace laureate, Mother Teresa lived a more complicated life than was known at the time including a secret lifelong struggle with her faith. Nevertheless, her very name became a metaphor for selflessness and goodness during her lifetime.

"Being unwanted, unloved, uncared for forgotten by everybody, I think that is a much greater hunger, than person who has nothing to eat.

**Ms. Arti G. Bhatkar**  
M.Sc.-I (Microbiology)

## Sir C.V. Raman - The Nobel Prize Winner

Since 1901, the Nobel prize has been awarded for outstanding achievements in Physics, Chemistry, Medicine or Physiology, Literature and Peace. The Nobel prize is an international award which is administered by the Nobel Foundation in Stockholm. The Foundations of the prize were laid in 1895.

This year, Alfred Nobel who invented dynamite, wrote his last will in which he left most of his wealth to establish the Nobel prize. Nobel was not just an inventor. He was also a scientist, author, entrepreneur and pacifist who spoke against war. The Nobel Foundation was established in 1900. It manages the assets provided by Nobel for awarding the prizes. Each prize includes a medal, a cash award and a personal diploma. The Nobel laureates also present their Nobel lectures before a huge audience in the days preceding the award ceremony.

The Nobel prizes embody a lot of prestige. In fact they are the most prestigious award in the designated fields. Except for the Nobel peace prize, all the prizes are presented in Stockholm, Sweden at the Annual Award Ceremony on December 10. This day is also the death anniversary of Nobel.

There are many scientists in science who win the Nobel prizes for there designated fields. In Physics first nobel prize was awarded to Physicist Wilhelm Roentgen in recognition of extra ordinary services he has rendered by the discovery of the remarkable rays. Only Marie Curie in 1903 and Maria Goeppert Mayer in 1963 are two women who won Nobel prize in Physics.

In India the first Nobel prize winner in Physics is CV Raman. Chandrasekhara Ventata Raman was born at Thiruchirapali in Southern India on November 7th, 1888. His father was a lecturer in Maths and Physics so that from the first he was immersed in an atmosphere. He entered Presidency College, Madras in 1902 and in 1904 passed his BA examination, winning the first place and the gold medal in Physics, in 1907 he gained his MA college degree, obtaining the highest distinctions. His earliest research in optics and acoustics - the two field of investigation to which he has dedicated his entire career were carried out while he was student.

Since at that time a scientific career did not appear to present the best possibilities, Raman joined the Indian Finance Department in 1907, though the duties of his office took most of his time. Raman found opportunities for carrying on experimental research in laboratory of the Indian Association for the cultivation of science at Calcutta (of which he became Honorary Secretary in 1919).

In 1917, he was offered the newly endowed Plait Chair of Physics at Calcutta University and decided to accept it. After 15 years at Calcutta he became professor at the Indian Institute of Science at Bangalore (33-1948), and since 1948 he is Director of the Raman Institute of Research at Bangalore, established and endowed by himself. He also founded the Indian Journal of Physics, in 1926 of which he is the Editor. Raman sponsored the establishment of the Indian Academy of sciences and has served as president since its inception. He also initiated the proceeding of that academy in which much of his work has been published and is president of the Current Science Association, Bangalore, which publishes current science.

Some of Raman's early memories appeared as Bulletins of Indian Association for the Cultivation of Science (Bull 6 and 11, dealing with the Maintains of vibration, Bull 15, 1918, dealing with the theory

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of the musical instruments of the violin family) He contributed an article on the theory of musical instruments to the 8th volume of the Handbuch der Physics, 1928. In 1922 he published his work on the "Molecular diffraction of Light", the first of series of investigations with his collaborators which ultimately led to his discovery. On the 28th of February, 1928 of the radiation effect which bears his name ("A New Radiation", Indian) Physics 2 (1928) 387), and which gained him the 1930 Nobel prize in Physics.

Ms. Trupti S. Davhale

B.Sc.-I

### *The Unplucked Rose*

One among the thousand,  
In the rose garden,  
Hidden in the crowd of flowers,  
That one crimson rose catches my attention.

It's polite petals but louder thorns,  
with the perfect curves on leaves  
Such elegant beauty it holds,  
and it's dewy fragrance I receive

Emblished by dewdrops,  
Submerged in shy,  
Wearing the pink blush,  
Growing to embrace the sky

Floating on the song of wind,  
Though giving lessons of peace

It was bud, just before the dawn,  
and now bloomed into a lovely flower  
tossing it's head towards morning sunshine,  
just like it is taking shower

This crimson rose, is home to many feelings of mine  
This crimson rose, sends shivers down my spine  
This crimson rose, is sight of  
exhilaration to many broken hearts  
This crimson rose, is breathe of  
relief to many stigmatizing parts.

May this crimson rose remains  
'unplucked' through its entire life,  
And wins it's fight over solitude.  
May this crimson rose spellbinds  
everyone with its heavenly beauty,  
And make the mother soil  
feel proud with its gratitude.

Ms. Vaishnavi S. Ghatol

B.Sc.-II

### *While Dwelling among the woods....*

One of my favourite thing to do,  
Is to swell among the woods,  
Dwelling for days and hours,  
find searching for covers,

The flickering eight rays,  
Making their way,  
Through the dense canopy of trees,  
Setting the shadows free.

The shimmering droplets caught on leaves,  
Enhancing the beauty of landscape  
And lush greenary indeed,  
Is adding the anthesis in space.

The fragrance of bloomed flowers in air,  
Is making the atmosphere light and pleasant  
The rained forest seemed to have  
An unknown stories with present.

The chirps and songs of birds,  
coming from every direction,  
Is breaking the strings of thoughts;  
weaved in my head,  
By catching my attention.

The river passing through forest,  
Is wide and deep  
The water is blue and clear,  
with the ooze fast asleep.

The gentle murmur of water,  
Is welcoming the new day,  
And the cascading flow of  
water through rocks,  
Is taking the dirt away.

This dense beautiful forest,  
With tall and wet and lovely woods;  
Making me realize that -  
They are ideal for livelihood !

Ms. Vaishnavi S. Ghatol

B.Sc.-II



## *The Nobel Prize Winner - Robert Koch*

### **The Nobel prize gives one the opportunity to take public stands**

The German doctor Robert Koch was born on 11th December 1843 and died on 27th May 1910. He is considered to be the founder of the modern bacteriology. His discoveries made a significant contribution to the development of the first 'magic bullets' chemicals developed to attack specific bacteria and Koch was awarded a Nobel prize in 1905. Koch developed a new experimental method to test whether a particular micro-organism is the cause of a disease. Building on Pasteur's work on germ theory, Koch used experiments to prove that the bacterium, *Bacillus anthracis* was the cause of anthrax. The bacterium could be observed in the tissue of anthrax victims. He extracted this bacterium from a sheep which had died of anthrax, grew it and injected a mouse with it. The mouse developed the disease as well. Koch repeated this process over 20 generations of mice, before he announced in 1876 that he had proved this bacterium caused anthrax.

Koch continued to improve his method and techniques. By solidifying liquids such as broth with gelatin and agar, for instance, he created a solid medium for growing bacteria which was easier to handle than the liquids used by Pasteur. Koch's assistant Julius Richard Petri developed the petri dish, which made the observation of bacteria even easier. Koch and his team also developed ways to staining bacteria to improve the bacteria's visibility under the microscope, and were able to identify the bacterial causes the tuberculosis and cholera. Adopting Koch's method, other researcher were able to identify the bacteria that caused disease such as typhus, tetanus and the plague.

On March 24, 1882, Robert Koch announced to the Berlin Physiological Society that he had discovered the cause of tuberculosis. Three weeks later, on April 10, he published an article entitled "The Etiology of tuberculosis". In 1884, in a second paper with the same title, he first expounded "Koch Postulates", which have since become basic to studies of all infectious diseases. He had observed the bacillus in association with all cases of the disease, had grown the organism outside the body of the host, and had reproduced the disease in a susceptible host inoculated with a pure culture of the isolated organisms.

Robert Koch researched anthrax bacteria and discovered the tuberculosis bacteria. Koch continued his studies on tuberculosis, hoping to find cure. In 1890, he announced the discovery of tuberculin, a substance derived from tubercle bacilli, which he thought was capable of arresting bacterial development in vitro and in animals. This news gave rise to tremendous hope throughout the world, which was soon replaced by disillusionment when the product turned out to be an ineffective therapeutic agent. Tuberculin later proved to be a valuable diagnostic tool.

In 1905, when Koch was awarded the Nobel prize in medicine, he devoted his acceptance speech

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to promoting greater understanding of tuberculosis and its causative agent. Koch died in 1910, leaving the scientific community and the world in general with a valuable inheritance of knowledge and understanding resulting from his seminal work on anthrax, cholera, trypanosomiasis, and especially tuberculosis.

In the wake of Koch's discoveries, subsequent progress in conquering tuberculosis has been relatively slow. In the laboratory, recognition of the avian bacillus by Nocard in 1885 and differentiation of bovine and human tubercle bacilli by Theobald smith in 1898 laid the ground work for identification of other mycobacterial species. Diagnosis of tuberculosis was aided by Ehrlich in 1882, discovery of X-Rays by Roentgen in 1895, development of the tuberculin skin test by van pirquet and Mantoux in 1907-1908, and preparation of purified protein derivative of tuberculin by seibert in 1931. In the 1903s, the epidemiological work of Wade Hampton Frost led to a better understanding of epidemiology of tuberculosis. In the 1940s using seibert's PPD administered by the Mantoux method and chest X-ray examinations the United States Public Health Service began a series of studies that elucidated further the epidemiology of tuberculosis.

The Nobel prize in Physiology or Medicine 1905 was awarded to Robert Koch "for his investigations and discoveries in relation to tuberculosis". Few of its recipients can have deserved the prize more than Robert Koch. At the time it was considered extraordinary that he had not been given it already, and his biographer Thomas D. Brock said 'one cannot even imagine how medicine would have developed without Koch'. One of the founders of modern bacteriology, he identified the tuberculosis and cholera bacilli, traced the life cycle of anthrax and discovered how sleeping sickness is transmitted. 'Koch postulates' are the fundamental basis for the study of all infectious diseases and his work was hugely influential in the field of public health.

His research led to the creation of Koch's postulates. a series of four generalized principle's linking specific Micro-organism to specific diseases that remain today the 'gold standard' in medical microbiology. For his research on tuberculosis, Koch received the Nobel prize in Physiology or Medicine in 1905. The Robert Koch institute is named in his honor. Certain criteria suggested for experiment caused Koch postulates are as follows :-

- 1) Micro-organism or pathogen must be present in all cases of the disease & demonstrate its absence in healthy individuals.
- 2) Pathogen must be isolated from the diseased host and grown in pure culture.
- 3) Pathogen from pure culture must cause the disease when inoculated healthy susceptible experimental animal.
- 4) Pathogen must be re-isolated from the experimentally infected animal & must be the same as originally observed.

**Ms. Prajakta V. Deshmukh**  
B.Sc.-II

## THE NOBEL PRIZE AND ITS WINNERS

Any of six international prizes awarded annually for outstanding work in Physics, Chemistry, Physiology or Medicine, Literature, Economics and the promotion of peace. The "Nobel Prizes" first awarded in 1901, are decided by members of Swedish learned society or in the case of the peace prize, the Norwegian parliament.

The peace prize is awarded in Oslo, Norway, while the other prizes are awarded in Stockholm, Sweden. Baruch Aba Shalev, Author of a book on the Nobel prize, has said "the Nobel prize has come to be regarded as the best known and most prestigious award available in the fields of literature, medicine, physics etc."

In 1968, Sverige's Riksbank instituted an award that is often associated with the Nobel prizes the Sveriges Riksbank prize in Economic Sciences in memory of Alfred Nobel. The first such prize was awarded in 1969. Although it is not an official Nobel prize, its announcements and presentations are made along with the other prizes.

The Academy grants the Nobel prize in Literature. The Nobel prize peace is not awarded by Swedish organization but by the Norwegian Nobel Committee. Each recipient or laureate receives a gold medal, a diploma, and a sum of money which depends on the "Noble Foundations income that year. In 2011, each prize was worth SEK 10 million. The prize is not awarded posthumously; however, if a person is awarded a prize and dies before receiving it, the prize may still be presented". A prize may not be shared among more than three people. The average number of laureates per prize has increased substantially over the 20th century.

In 1895, Alfred Nobel, who invented dynamite, wrote his last will in which he left most of his wealth to establish the Nobel prize. Nobel was not just an inventor. He was also a scientist, author, entrepreneur and pacifist who spoke against war. The Nobel Foundation was established in 1900.

Mahatma Gandhi was nominated for the Nobel peace prize five times between 1937 and 1948. He never received it however, and fell to an assassin's bullet on 30th January 1948, 2 days before the closing date for the 1948 peace prize nominations. That year the peace prize was not awarded as perhaps he had been the likely choice.

There is no Nobel prize for mathematics. The Nobel prize has been awarded to families too with the Curie family getting the most (five).

### 1) Rabindranath Tagore :

Rabindranath Tagore was awarded with the Nobel prize in Literature 1913 "because of his profoundly sensitive, fresh and beautiful verse, by which, with consummate skill, he has made his poetic thought, expressed in his own English words, a part of the literature of the West". Rabindranath Tagore (1861-1941) was a poet, philosopher, educationist, artist and social activist. Hailing from an affluent land-owning family from Bengal. He was the first non-European and first Asian to be awarded the Nobel prize in literature in 1913.

### 2) C.V. Raman :

Sir Chandrasekhara Venkata Raman was awarded the Nobel prize in Physics for the year 1930.

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C.V. Raman was born at Thiruvanaikaval, near Tiruchirappalli, Tamil Nadu and was awarded the Nobel prize in Physics 1930 "for his work on the scattering of light and for the discovery of the effect named after him". A traditionally dressed man, he headed an institute that is today named after him : the Raman Research Institute, Bangalore.

### 3) Har Gobind Khorana :

Har Gobind Khorana shared the Nobel prize in physiology or Medicine 1968 for his "interpretation of the genetic code and its function in protein synthesis". Har Gobind Khorana (1922-2011), a person of Indian origin, shared the 1968 Nobel prize in Physiology or medicine with Robert W. Holley and Marshall W. Nirenberg.

### 4) Mother Teresa :

Mother Teresa was awarded the Nobel peace prize 1979 in recognition of her 'work in bringing help to suffering humanity'. Mother Teresa's real name was "Agnes Gonxhe Bojaxiu" (1910-1997) was born in Skopje, then a city in ottoman Empire. She was a Roman Catholic nun of Albanian origin and Indian citizenship. She founded the international order of "The Missionaries of Charity" whose primary task was to love and care for those persons nobody was prepared to look after for years in the slums of Kolkata (Calcutta), her work centred on caring for the poor and suffering, among whom she herself died.

### 5) Rajendra K. Pachauri :

Rajendra Kumar Pachauri (Born 20 August 1940) has served as the chairperson of the intergovernmental panel on Climate Change (IPCC) since 2002, which was awarded the Nobel peace prize in 2007 during his tenure.

### 6) Venkatraman Radhakrishnan :

Venkatraman Radhakrishnan is awarded the Nobel prize for studies of the structure and function of the ribosome". Venkatraman Radhakrishnan, born in Chidambaram, Tamil Nadu, shared the 2009 Nobel prize in Chemistry. He is now a US citizen.

### 7) V.S. Naipaul :

Sir Vidiadhar Surajprasad V.S. Naipaul, TC (Born 17 August 1932) is an Trinidadian - British writer of Indo-Trinidadian heritage of Bhumihiar Brahmin known for his novels focusing on the legacy of the British Empire's colonialism. He has also written works of non-fiction, such as travel writing and essays. In 2001, Naipaul was awarded the Nobel prize in literature.

### 8) Amartya Sen :

Amartya Sen awarded the Nobel prize in Economics in 1998 for his contributions to welfare economics. Amartya Sen, born in 1933 was the first Indian to receive the Nobel prize in Economics. He has made several keys contributions to research in this field, such as to the axiomatic theory of social choice; the defination of welfare and poverty indexes; and the empirical studies of famine.

### NOBEL PRIZE WINNERS BY COUNTRY :

United States has the most Nobel prize winners with 368 followed by the UK with 132 and Germany with 107. The Nobel prize is the most distinguished and coveted global honour. It has recognized individuals

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and groups from over 30 countries or territories. In the 104 years of its existence the Nobel prize has been awarded to close to 1000 laureates.

The first multiple recipient of the Nobel prize was Marie Curie, a polish-born and naturalized French Physicist and chemist famous for her work on radiation. Curie's awards were also unique because she received the prizes in two different categories. The curie family in total has had five Nobel Laurates.

The United States of America leads the ranking of Nobel prize winners by country. The United States has had 368 winners. The majority of these prizes have been in the Nobel prize for Physics. This has France in the lead with 16 Laureates.

The most famous Nobel peace prize Laureate was "Nelson Mandela", the first president of postapartheid South Africa. He jointly received the 1993 peace award with Frederik de Klerk for their efforts in ending apartheid in South Africa. The anti-apartheid efforts in South Africa had earlier seen Reverened Desmond Tutu being awarded the same recognition in 1938.

Rank	Country	Nobel prizes
01	United States	368
02	United Kingdom	132
03	Germany	107
04	France	62
05	Sweden	30
06	Switzerland	26
07	Japan	26
08	Canada	23
09	Russia	23
10	Austria	21
11	Italy	20
12	Netherlands	20
13	Denmark	14
14	Narway	13
15	Israel	12
16	Australia	12
17	Poland	12
18	Belgium	10
19	South Africa	10
20	India	10

"Learning gives Creativity, Creativity leads to Thinking, Thinking provides Knowledge, Knowledge makes you Great" ..... Dr. A.P.J. Abdul Kalam

Mr. Yogesh H. Irache  
B.Sc.-III

# चित्रबिंब



Participation of N.C.C. Cadets in Blood Donation



Felicitation of TSC Cadet of N.C.C. Akash Nalwade & Ashish Ghumre



Participation of N.C.C. Cadets in Cleanliness Campaign Rally organised by Dist. Collector Office, Akola



Participation of N.C.C. Cadets in Road Safety & Traffic Awareness Day Programme



Participation of N.C.C. Cadets in Road Safety & Traffic Awareness Day Programme



Participation of N.C.C. Cadets in Thalesmia Detection Camp



Participation of N.C.C. Cadets in Morna River Cleanliness Campaign



Tree Plantation by N.C.C. Cadets and Officers

# चित्रबिंब



Sports Adventure Tour - Ajanta & Jadicha Dev



Educational Study Tour of Dept. of Botany to Plant Biotechnology Research Centre, Dr. P.D.K.V., Akola



Educational Study Tour of Dept. of Zoology to Entomology Department, Dr. P.D.K.V., Akola



Educational Study Tour of Dept. of Chemistry to Adarsh Goseva Evam Anusandhan Prkalp, Mhaipur



Educational Study Tour of Dept. of Microbiology to Govt. Milk Scheme, Akola



Educational Study Tour of Dept. of Mathematics to Raman Science Centre, Nagpur



Participation of Environmental Cell & N.S.S. in Morna River Cleanliness Campaign



Installation of Bird Nest & Bird Water Feeder Pots in College Campus by Dept. of Zoology, Botany & Environmental Cell





Report Section

## DEPARTMENT OF BOTANY

### REPORT

Department of Botany organizes various Acedemics, co-curricular, Research as well as Extra-curricular activities. The important highlights of various activities organiged by Dept. of Botany in session 2017-18 are as follows.

On 23/07/2017, on the occasion of Vansavardhan Divas Dept. of Botany inagurated 'Botanical Nursery' developed by students of "Holy Basil" at the hands of Dr. Ajayji Deshmukh Registrar, SGBAU Amravati. Dr. R.B. Heda, Ad. Motisinghji Mohta, Dr. Ravindraji Jain, Shri Avinashji Sureka graced the occasion. All staff members of Botany Dept. & all students of "Holy Basil club" were present.

On the eve of Independence day "Tree Plantation" activity was carried out in the college campus & in Botanical Garden of the college on 15.08.2017. Principal Dr. V.D. Nanoty, Dr. U.K. Bhalekar, Prof. R.J. Chavan grace the occasion. Mrs. V.N. Badgular, Prof. P.M. Khadse, Prof. Dr. A.A. Sangole. Prof. S.V. Madavi, all HOD & staff members, students were present on this occasion.

On 19/08/217, Tree Plantation activity was carried out at the hands of Vice Chancellor Dr. Murlidharji Chandekar, S.G.B.A.U., Amravati. Dr. R.B. Heda, Adv. Motisinghji Mohta, Principal Dr. V.D. Nanoty, Dr. S.G. Chapke, Principal, Smt. L.R.T. College of Commerce, Akola grace the occasion. All staff members, students of Botany Department were present on this occasion.

Seminars for B.Sc.II & III yr. Students using LCD projector, power point presentation were conducted in both session.

Educational visits of B.Sc.II & III yr students was arranged in "Plant Biotechnology Research Center" at Dr. P.D.K.V., Akola on 15/02/2018.

Mr. Harshal Bais & Mr. Gaurav Akot were participated in University level seminar & poster competition on 19<sup>th</sup> Jan 2018 organized by Dept. of Botany & IQAC, Shri Dr. R.G. Rathod College, Murtizapur.

#### **Achievements of the faculty members**

Mrs. V.N. Badgular published 1 research paper in Aayushi International Interdisciplinary journal. She participated in 2 National conferences, 2 seminar & 2 Workshops and presented 4 research papers. She also delivered guest lecture at Sonala on 'Ranbhaji : Wealth for health' in Mahila Melava at NSS camp. She is working as co-ordinator of Environmental cell.

Shri P.M. Khadse has published 2 research paper in International journal of repute viz Ayushi International Interdisciplinary journal and International journal of pure & applied research in Science & Technology. He has participated in 2 National conference, 1 seminars & 1 workshop & presented 4 research paper. He delivered a lecture on "Biodiversity & Wildlife Managements" for B.Sc. III yr. on the occasion of ozone day. He is working as co-ordinator of Guardian Teacher committee.

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Dr. A.A. Sangole has published A Text Book of Botany for IV SEM of B.Sc. II yr, Dyanpath Publication ISBN (978-93-872778-04). She has published, 2 research paper in International journal of pure & applied research in Engineering & Technology also other paper Aayushi International Interdisciplinary journal. She has participated in 2 National conferences, 1 seminar & 1 workshop & presented 5 research paper.

Shri S.V. Madavi has published 2 research papers in International journal of repute viz International journal of scientific Research in Science & Technology & in other i.e. Aayushi International Interdisciplinary Research. He has participated in 2 National conference, 1 seminar & 1 workshop & presented 4 research paper.

### Holy Basil Club

(Botanical Association for sustainable & Innovative learning)

Holy Basil club is an association made by Botanist & students from Botany Dept. of Shri R.L.T. College of Science, Akola.

Various activities were taken during the session.

**Botanical Nursery** - On 23/07/2017, on the occasion of Vansavardhan Divas Dept. of Botany inaugurated 'Botanical Nursery' developed by students of "Holy Basil" at the hands of Dr. Ajayji Deshmukh Registrar, SGBAU Amravati. Dr. R.B. Heda, Adv. Motisinghji Mohta, Dr. Ravindraji Jain, Shri Avinashji Surekha grace the occasion. All staff members of Botany Dept. & all students of "Holy Basil Club" were present.

A Guest lecture of Dr. S.P. Rothe, Head & Vice Principal of Shri Shivaji Science College, Akola held on medicinal plants Dt. 28.07.2017 at 3.30 p.m. Prof. Mrs. V.N. Badgujar, Prof. P.M. Khadse, Dr. A.A. Sangole, Prof. S.V. Madavi, students of Holy Basil Club were present.

Exhibition cum competition of Edible fruits were arranged on Dt. 20.11.2017 in Botany Department. Principal Dr. V.D. Nanoty inaugurated the Fruit-exhibition. Dr. U.K. Bhalekar, Dr. S.W. Bhavare, Dr. S.M. Nagrale grace the occasion. Dr. P.S. Kokate, Head Dept. of Botany, Shri Shivaji Science College, Akola Judge the competition.

Prof. V.N. Badgujar announces the newly body members formation of the Holy Basil Club. Prof. P.M. Khadse, Dr. A.A. Sangole, Prof. S.V. Madavi, all the students of Botany Dept. were present.

● Winners of Exhibition cum competition of Edible fruit collection.

➤ First Prize	- Prerana Ubale, Sneha Wahurwagh, Nikita Modak	B.Sc. I
➤ Second Prize	- Aishwarya R. Sable, Nikita J. Upadhye	B.Sc. I
➤ Third Prize	- Rupali S. Solanke, Pallavi M. Sonone	B.Sc. I
➤ Consolation Prize	- Gaurav R. Akot, Harshal Bais	B.Sc. II

**Prof. Mrs. Vaishali N. Badgujar**

Head

Department of Botany

## DEPARTMENT OF CHEMISTRY

### REPORT

It is with great pleasure I share with you the annual report of chemistry department for the session 2017-2018 of Shri R.L.T. College of Science, Akola. Department is contributing significantly in creating and disseminating knowledge in various areas through undergraduate, postgraduate and doctoral programmes and providing an education through practically focused, multidimensional, quality teaching-learning process in excellent academic environment. In our pursuit of excellence, we persistently seek and adopt innovative methods to improve the quality of education. The benchmarks we set for ourselves in the field of teaching and research propel us in our journey towards excellence. Faculty of the department comprises qualified and goal-oriented members and always at forefront to organize various academic activities to inculcate effective learning abilities and research skills, to extend the intellectual depth, to make students creative, innovative and self-reliant.

To expose the students in the frontier areas in chemistry and to enhance employability skill of them, department is always ahead in performing the various academic activities. The important academic activities and the programmes organized by the department of chemistry during the session 2017-18 are as mentioned below.

- **Inauguration of 'CRYSTAL Club'** - To Enhance the academic activity of student and to increase the participation of student in social activity, department of chemistry has decided to establish one student club and in view of this our department establishes '**CRYSTAL Club**' (*Chemical Research by Young Scientist & Technicians Aborting Lacking of Society*) which was inaugurated on 12<sup>th</sup> September 2017. **Principal Dr. V. D. Nanoty** was the president for this function and Dr. U.K. Bhalekar Head, Department of microbiology was the inaugurator for the function. Presence of head's of various departments had been added grace to this function. Ms. Tarnnum Kureshi was the student President of this club and students from M.Sc. II year and I year are the members of this club with some officiating body.
- **'Blank Paper Bank' : 'To Save the Paper, to Save the Environment'** with this motto Department of Chemistry's CRYSTAL Club developed a new Best practice of Blank Paper Bank and it was made open to all on 22<sup>nd</sup> December 2017 Hon'bleVijaykumarji Toshniwal, Vice-President of The B.G.E. Society was the chief guest for this function . The concept behind this bank is to save the blank paper. Papers from the used practical record books are collected in a box and from that note books have been made.

Crystal Club not only stop this activity by preparing these note books but to developed a social awareness among the students these books made from blank papers were distributed to needy school childrens of the village Sonala, adapted by NSS Unit of our college.

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The important academic activities of department of chemistry during the session 2017-18 are as highlighted below.

- **Guest lecturers – ‘CRYSTAL Club’** organized the guest lectures of eminent personalities in the subject chemistry, **Prof. Dr. V.S. Jamode**, Former Pro-Vice Chancellor S.G.B. Amravati University, Amravati and **Prof. Dr. A.S. Wankhede** for M.Sc.-I and II year students.
- **Seminars and group discussions** - The seminars and group discussions of B.Sc.-II & III students were conducted in the months of September, October-2017 and February, March-2018 under the supervision of **Dr. Pradip P. Deohate, Mr. S.C.Zyate, Dr. Pravin R. Kawle and Dr. Kavita M. Heda.**
- **Atchem ... aptitude test in chemistry** - To create interest in chemistry, assess the conceptual understanding and to upgrade the subject knowledge, aptitude test in chemistry was conducted for B.Sc.-III year students on 22<sup>nd</sup> February 2018. Ms. Nita D. Mhaisne and Ms. Anju R. Dhande have achieved the 1<sup>st</sup> and 2<sup>nd</sup> position respectively. Total 243 students were participated in this test. Test was co-ordinated by **Dr. Pradip P. Deohate.**
- **Industrial visit / study tour** - As a part of curriculum enrichment activity and to inculcate scientific temper among the students the one day industrial visit / study tour to Adarsha Goseva Evam Anusandhan Prkalp, Mhaispur was arranged on 24<sup>th</sup> February 2018 under the supervision of **Dr. Pravin R. Kawle.** During the visit Mr. Ramakant Bhopale, Manager Adarsha Goseva Anusandhan gave brief information about the working of the plant and rehabilitation of indigenous breed cow and also explain the laboratory process of manufacturing ayurvedic medicinal products, cosmetics, ointments, syrup, soaps etc. Students of B.Sc.-II along with **Mr. Sankesh C. Zyate** and **Mr. Vinod D. Deotale** with 5 other teaching, non-teaching staff members were participated in this study tour.
- **Consultancy services** - Consultancy services like analysis of drinking water, irrigation water, determination of physico-chemical parameters and different types of estimations of samples of projects of school and college students are engaged.

The important achievements of the faculty members of department of chemistry during the session 2017-18 are as highlighted below.

- **Dr. Pradip P. Deohate** has received the "Award for Excellence in Research" in 3<sup>rd</sup> South Asian Education Awards-2018 at Hyderabad for his contribution in research. He has published 6 research papers in national and international journals. He has participated in 3 conferences, 1 workshop and presented 4 research papers. Under his guidance 2 students are doing the Ph.D. research work out of which 1 has submitted the Ph.D. thesis. He has guided 3 students for research project.
- **Dr. Poonam T. Agrawal** has published 3 research papers in international journal. She has

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participated in 4 conferences, 1 workshop and presented 4 research papers. She has guided 3 students for research project. She is working as the Advisory member of IQAC. She is working as the executive member of AUCTA. She has chaired the technical session of one International and one National conference each. She has worked as a resource person and jury member for various academic and scientific programmes.

- **Dr. Pravin R. Kawle** has published 2 research papers in national and international journals. He has participated in 3 conferences, 1 workshop and presented 3 research papers. He has guided 3 students for research project.
- **Dr. Kavita M. Heda** has published 2 research papers in national and international journals. She has participated in 4 conferences, 2 workshops and presented 4 research papers. She has guided 3 students for research project. She has worked as a jury member for various academic and scientific programmes.
- **Dr. Ashish G. Sarap** has published 1 research papers in international journal. He has participated in 2 conferences, 1 workshop and presented 2 research papers. He has guided 3 students for research project. He has delivered a guest lecture at Sangdudkar Mahavidyalaya, Daryapur. He is working as the co-officer for B.Sc. I year Home Examination.
- **Mr. Vinod D. Deotale** has published 1 research paper in international journal. He has participated in 2 conferences, 1 workshop and presented 2 research papers. He has delivered a talk on Late Dr. A.P.J Abdul Kalam on Wachan Prerana Din. He has guided 4 students for research project.
- **Mr. Sankesh C. Zyate** has published 1 research paper in international journal Presented 1 research paper in conference. He has started the NET/SET Coaching class for the M.Sc. Students of our department. He has guided 4 students for research project.
- **Ms. Ketki D. Bansod** has submitted the thesis for the award of Ph.D. degree under the guidance of **Dr. P.P. Deohate**. **Mr. Ankit N. Mishra** and **Ms. Kalpana A. Palaspagar** are working for Ph.D. degree in research laboratory of department of chemistry. They have also published research papers in national and international journals, attended the conferences and presented research papers.

Students are at the centre of all endeavors in department of Chemistry. During the session 2017-18, additions to the students' achievements are as follows.

- **Ms. Farin B. Maniyar** (M.Sc.) has been stood 3<sup>rd</sup> in merit list of M.Sc.-Chemistry examination of S.G.B. Amravati University, Amravati (S-2017).
- **Ms. Vrushali Wankhede** (M.Sc.) has been stood 8<sup>th</sup> in merit list of M.Sc.-Chemistry examination of S.G.B. Amravati University, Amravati (S-2017).
- **Ms. Priya V. Wankhede** (B.Sc.-III) has participated in district and university level research festival "Avishkar" and achieved the colour coat of S.G.B. Amravati University, Amravati and has been

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awarded second Prize. She has been Selected for State level Research Festival "Avishkar" 2017. Her Project title was 'Impact of idol immersion on water' and guided by **Dr. Pravin. R. Kawle**.

- **Ms. Varsha D. Yennewar** (M.Sc.-II) has participated in district and university level research festival "Avishkar" and achieved the colour coat of S.G.B. Amravati University, Amravati and has been awarded second Prize at PG level. She has been selected for state level research festival "Avishkar". Her Project title was 'Impact of preparation of herbal tablets for food preservation'. She has completed this project under the guidance of **Dr. Poonam T. Agrawal**.
- **Ms. Pratiksha V. Banole** and **Ms. Isha D. Bhagwatkar** (B.Sc.-I) have been participated in university level intercollegiate chemistry-quiz competition.
- **Ms. Megha Rajpal** (B.Sc.-II) has been achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition organized by AUCTA.
- **Ms. Sayali G. Jagtap** (B.Sc.-III) has been achieved 1<sup>st</sup> prize in university level intercollegiate seminar competition organized by AUCTA.
- **Ms. Tarannum S. Kureshi** (M.Sc.-II) has participated in university level intercollegiate seminar competition organized by AUCTA.

**Dr. Poonam T. Agrawal**

Head, Department of Chemistry  
In-charge, P.G. Department of Chemistry

## DEPARTMENT OF COMPUTER SCIENCE & IT

### REPORT

Department of Computer Science established on 1<sup>st</sup> July in 1997 and Information Technology introduced in the year 2010-11. Computer Science grant aid in April 2012 and first post of Assistant Professor filled in 2014.

Department runs various activities throughout the session like regular students' Seminar, Project & Educational tour as per the curriculum.

Department of Computer Science & IT organized **Spoken Tutorial Project** in the month Feb-2018 and online assessment test conducted on 07-03-2018. In Final Assessment Test as a Free and Open Source Software on **C++** which is online remotely conducted by IIT Bombay and **07 students** from B.Sc. III successfully passed with above 40 % marks in this test and issued **Certificates** which are offered by the **Spoken Tutorial Project, IIT Bombay**, which are very valuable in their career point of view. **SELF** (Spoken Tutorial based Education and Learning through Free and Open Source Softwares (FOSS) study).

Department also arranged Guest lecture on **Mobile Security and An Enhanced Interface for Pattern Lock** by Mr. Harshal A. Tupsamudre, Researcher at Tata Consultancy Services held on 27-02-2018, with the presence of Principal Dr. V.D. Nanoty, Prof. Ghatole, Prof. R.G. Chanvan, Prof. R.B. Ghayalkar and staff members of computer science & IT.

Speaker highlight of today's different perspectives of the mobile security and pattern locking, All the students appreciated and got benefited from this Guest Lecture.

On the behalf of Department of Computer Science Prof. R.B. Ghayalkar delivered lecture on "**Cyber World & Security**" in a workshop EUREKA 2017-18 which jointly organized by our college and Akola district Science Forum for school students and there after students visited departments on 25 Nov. 2017.

Assistant Professor Mr. R.B. Ghayalkar completed his refresher course and presented a research paper presented on "**Use of cloud Computing in the Field of Education A Review**" in the International conference which was held at SSSKR Innani Mahavidyalaya Karanja (Lad), Dist. Washim.

Prof. R.G. Chavan / Prof. R.B. Ghayalkar  
Head / Incharge  
Department of Computer Science & IT



## DEPARTMENT OF ELECTRONICS

### REPORT

Department Of Electronics is one of the creative departments of Shri R.L.T. College of Science, Akola. Knowledge of Electronics Science and its fundamentals broaden the outlook of the students and helps in improvement of their overall performance and use in day to day life.

Staff members in the department include Shri R.G. Chavan, Associate Professor and HOD, Shri R.D. Chaudhari, Assistant Professor, Shri M.M. Kulkarni (CHB), Shri N.O. Chimankar (CHB), Shri J.S. Tated and Non Teaching Staff Mr. G.B. Giri (Lab Assistant), Mr. G.B. Mairal (Lab. Attendant - retired December 2017), Mr. S.G. Babulkar.

#### Departmental Activities and Student Achievements :

- Conduction of seminar for B.Sc.II and B.Sc.III students using LCD projector and power point presentation.
- Experimental kits, Power supplies, of B.SC.I and II are assembled and successfully built by final year students as a part of their project work. (The approximate cost is *Rs. fifty thousand.*)
- **Mr. Mohinder Arora** appointed as a Lieutenant in Indian army.
- **Mr. Yash Vidyasagar of** B.Sc.II successfully participated in university level research festival-avishkar.

#### Staff Achievements :

- Shri R.G.Chavan Attended National Conference On Recent Innovations In Science And Engineering (NC-RISE 17) at Mauli Group Of Institutions, Shegaon.
- Appointed as member of subject examination committee for winter 2017 and summer 2018 examination by S.G.B.Amravati University, Amravati.
- Shri R.D. Chaudhari attended National Conference on Recent Innovations In Science And Engineering (NC-RISE 17) at Mauli Group of Institutions, Shegaon.
- Presented research paper in International conference on Advances in science technology and management (IC-ASTM) organized by college of engineering & technology Akola.
- Successfully completed refresher course on ICT from 28.2.2018 to 21/03/2018 at S.G.B.Amravati University Amravati.

**Prof. R.G. Chavan**  
Associate Professor and Head  
Department of Electronics

## DEPARTMENT OF LANGUAGES

### REPORT

Language is a primary source of communication. It is the method through which we communicate our ideas and thoughts with others. Some people even say that the language is what separates us from animals and makes us human.

The Department of Languages is growing and constantly renewing and improving its programs. All lectures reading and assignments are in English, Marathi and Hindi. We take pride in our innovative programming and dedicated teaching and our aim is to enable students communicate better in Marathi, Hindi and English too. The Department houses total 7 teachers including one full-time faculty. While six are on clock-hour basis.

#### Summary of Our Achievements

A.B. Khedkar worked as a judge, for a district level elocution competition SVACHATA KARANDAK SPARDHA organized by Z.P. Akola held at P.K.V. Akola.

A.B. Khedkar participated and attended a one day workshop on NAAC process dated 23rd July 2017 organised by the BGE Society, Akola held at Auditorium of Shri R.L.T. College of Science Akola.

Under-graduate student Prajakta Deshmukh & Ku. Nisha Chatarkar won consolation prizes in the essay competition organized by The Nehru Yuva Kendra, Akola. Even our 12<sup>th</sup> standard student Kiran Deshmukh too grabbed two consolation prizes for essay and elocution competition comprehensively.

#### Creative Writing Competition 2017-18 : A Report

Creative Writing Competition was organized to set a platform for emerging writers, poets etc. and to encourage and develop writing skills among students. The competition was jointly organised by the Department of Languages & The Library. The competition was a tremendous success, total 76 students participated in various categories. And top 12 contestants were felicitated for their excellent performance in the competition.

Mr. Mangesh Ubale (The Librarian) and Mr. Arun B. Khedkar (Assistant Professor) worked as Co-ordinator for this competition. Top 12 contestants were felicitated with a certificate and a book by the hands of the principal. All the participants too were given a certificate for their enthusiastic participation.

**Prof. Arun B. Khedkar**  
Assistant Professor in English  
Department of Languages

## LIBRARY & INFORMATION CENTRE

### REPORT

Our library grows day to day according to Dr. S.R. Ranganathan's Laws of Library Science. Text books, Reference books most valuable and knowledge oriented books enter in the library for academic year 2016-17 alongwith various types of competitive based books like MPSC, Banking, LIC, clerical grade, officer grade examinations, jobs in the fields of central government as well as state government.

Our library has 33601 books, 137 CD's and DVD's, 15 Journals, 33 Magazines, 17 Newspapers in various fields for researchers and students. College purchases magazines and "Diwali Issue" every year.

As a part of education oriented programme, our library launches 'Network Resource Centre' i.e. NRC attached with INFLIBNET & MHRD. These are main educational sources of UGC and Govt. of India. Through this programme, students of college, researchers, faculty members, users in various fields of knowledge can use these books and journals likely called e-books and e-journals. In this programme we can use 93809 e-books and 4137 e-journals at a time through NRC.

On the occasion of former president Dr. A.P.J. Abdul Kalam's birth anniversary "Vaachan Prerna Diwas" was celebrated on 14th October 2017. We celebrated '१४ तास अभ्यास - विकासाचा ध्यास' programme on 127th birth anniversary of Dr. Babasaheb Ambedkar on 14th April 2018. Students of college gathered in Auditorium Hall and studied continuously from 5.00 a.m. to 7.00 p.m. This shows the devotion in any discipline to achieve a goal. As a part of 'World Book Day' celebration on 23rd April 2018, we organised 'Books Exhibition'. In books exhibition various types of books of competitive examination, MPSC, UPSC, GK are displayed for reading purpose. Students of the college were present on this occasion. 'Best Reader' award is also awarded every year. We display great thoughts by great thinkers every day. New arrival of book is displayed on display board. We develop the students for cultural activity. Every year we celebrate the birth anniversary of father of library science Dr. S.R. Ranganathan. This year "Creative Writing Competition" was organized by Library in association with Department of Languages for students to enhance the skill of writing.

**Mr. Mangesh R. Ubale**  
Librarian  
Library & Information Centre

## DEPARTMENT OF MATHEMATICS

### REPORT

Department of Mathematics is one of the major departments of Shri R.L.T. College of Science and is having granted PG course. The research activity in Mathematics is also run by the department under the guidance of Dr. S.M. Padhye (former H.O.D.). Some of the important educational activities and achievements of students and faculty members of the department during the session 2017-18 are highlighted as below :

In the session 2017-18 the college reopened on 12.06.2017. All the teachers and staff joined at 11.00 am in the morning and started their respective works.

- Departmental staff :
  - (i) Dr. S.W. Bhaware (H.O.D. & Associate Prof.)
  - (ii) Ms. S.B. Tadam (Assistant Prof.)
  - (iii) Mr.Gautam Ingole (Non-teaching)
- Dr. S.L. Munde is newly appointed as an Assistant Professor in mathematics on 12.06.2017.
- The process of admission of B.Sc.I and M.Sc.II classes started on 12.06.2017
- All the teachers started their works of respective college committees.
- Students strength of the department :

S.No.	Class	No. of students	No. of sections
1	B.SC.I	207	2
2	B.SC.II	166	1
3	B.SC.III	146	1
4	M.SC.I	96	1
5	M.SC.II	82	1
	TOTAL	697	

- Number of C.H.B. teachers : 6 (3 for P.G. and 3 for U.G.)
- Seminars and Group discussions were conducted for B.Sc. II, B.Sc. III, M.Sc.I and M.Sc.II students in the month of September and October 2017 and March 2018.
- NET/SET coaching classes were conducted by former H.O.D. Dr. S.M. Padhye for M.Sc. students of mathematics.

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- A Regional Mathematics Olympiad examination is conducted by the department every year for the students of 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> standard of the Amravati region. This year the exam was conducted on 8<sup>th</sup> October 2017.
- University Level Ramanujan Competition of Mathematical Knowledge for Post Graduate students organised by the department of Mathematics, Sant Gadge Baba Amravati University, Amravati in collaboration with S.G.B.A.U. Mathematics Teachers Association Amravati was conducted by the department on 14<sup>th</sup> Jan. 2018.
- Five students of B.Sc. namely Ku. Aarti D. Katore, Ku. Aditi A. Kolhe, Mr. Arjun A. Nemade, Mr. Aniket A. Chandak and Mr. Dipak G. Lahase along with one teacher Dr. S.L. Munde participated in "State Level Workshop on Preparation, Strategies and Guidelines-2018" for P.G. Entrance Examinations in Mathematics at Brijlal Biyani Science College Amravati on 20-22 January 2018.
- Dr. S.W. Bhaware retired on 28<sup>th</sup> Feb. 2018 and the charge of the H.O.D. handed over to Ms. S.B. Tadam. Two teachers were appointed.
- During the session 2017-18 the achievements of the department are shown in the following table.

Sr. No.	Name of Faculty/ Students	Designation/ Class	Achievements
1.	Dr. S.W. Bhaware	Associate Prof. & H.O.D	Delivered a Guest Lecture on "Field Extension Theory" at Shri Jagdamba Arts, Commerce and Science College, Achalpur.
2.	Ku. S.B.Tadam	Assistant Prof. & H.O.D	Presented research paper "Characterization of uniformly continuous Pseudo Metric spaces" in International Conference On Recent Trends In Science And Technology ICRTST-2018 at S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad) on 22-23 March 2018.
2.	Dr. S. L. Munde	Assistant Prof.	1) Worked as a Subject Expert in University Level Seminar Competition in Calculus for U.G. students at Mahatma Fule College, Warud, Dist. Amravati on 24/09/2017. 2) Worked as a Chair Person of session in "State Level Workshop on Preparation, Strategies and Guidelines-2018" for P.G. Entrance Examinations in Mathematics at Brijlal Biyani Science College Amravati on 20-22 January 2018. 3) Worked as a Subject Expert in University Level Students Seminar Competition on 'Differential Equation' for U.G. students at Vidya Bharati Mahavidyalaya, Amravati, Dist.

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			Amravati on 10 <sup>th</sup> February 2018.  4) Worked as a Subject Expert in University Level Seminar Competition on Analysis for P.G. students at Shri Shivaji Atrs, Commerce and Science College, Akola, Dist. Akola on 10/03/2018.
3.	Ku. Karuna R. Sharma	C.H.B. Teacher & student of NET/SET Class	Participated in University Level Ramanujan Competition of Mathematical Knowledge for Post Graduate students organised by the department of Mathematics, Sant Gadge Baba Amravati University, Amravati in collaboration with S.G.B.A.U. Mathematics Teachers Association Amravati held on 14 <sup>th</sup> Jan. 2018 and stood at second position amongst participants.
3.	Ku. Rumaisa Tasneem Haris Hameed	P.G. Student (2016-17)	6 <sup>th</sup> Merit in M.Sc. Mathematics S.G.B. A.U. Amravati in Summer 2017 Examination.
4.	Ku. Renuka Vivekanand Agrawal	P.G. Student (2016-17)	10 <sup>th</sup> Merit in M.Sc. Mathematics S.G.B. A.U. Amravati in Summer 2017 Examination.
5.	Ku. Insiyah Daud Vora	M.Sc.-II Student (2016-17)	1) Achieved first prize with color coat in Intra University Students Research Convention AVISHKAR-2017 held at S.G.B.A.U. Amravati in December 2017 entitled "Financial issues of non self sufficient widows".  2) Participated and presented the research project entitled "Financial issues of non self sufficient widows" at P.G. level under the discipline CML in XII <sup>th</sup> Maharashtra state inter university research convention AVISHKAR-2017 at Mahatma Fule Krishi Vidyapith Rahuri, Dist. Ahmednagar in January 2018.  3) Participated in Post Graduate Inter University Seminar Competition on Algebra and stood at THIRD position at Phulsing Naik Mahavidyalaya, Pusad, Dist. Yavatmal on 07/02/2018.

- All the chairman's of college committee submitted their reports before 29.04.17.
- Activities of the Sky Observation Club - RLT-SOC are run under the secretary Dr. S.W. Bhaware and member Dr. S.L. Munde.

**Prof. Ms. Sujata B. Tadam**  
Head  
Department of Mathematics

## DEPARTMENT OF MICROBIOLOGY

### REPORT

Department of Microbiology, Shri R.L.T. College of Science, Akola delivers excellent education through dedicated collaborated efforts towards achieving recognition and honor at varied levels. We strive for providing advanced academic environment, innovative techniques and creating value based globally competitive expertise through well directed honest efforts.

As every year, this year too there has been enormous strength of students willing to be admitted to department. The department has strength of 342 students at UG level, 42 students at PG level and 01 research students. As a part of curriculum all theory and practical classes were started in mid of July 2017. The Department also runs the Career Oriented Program (CCLT, DCLT & ADCLT) to which total 110 students are admitted this year.

The department inspires the students for hard work and sincerity by all possible means. The students are encouraged for good work in different fields and duly awarded for their bright accomplishment. The brilliant results and splendid achievements of every year signify the ultimate goal of the department towards the world of education and society.

The department creates the right environment to nurture their exceptional talents.

- Dr. Umesh K. Bhalekar (Head, Department of Microbiology) is recognized Ph.D. Guide for the research field of Microbiology and Biochemistry.
- Dr. Umesh K. Bhalekar has worked as a judge for Akola District level "Avishkar- 2017" conducted by SGB Amravati University, Amravati in category Medicine and Pharmacy held on 4/12/2017
- Dr. Umesh K. Bhalekar has honor as Chief guest for cultural programs at Dr.PDKV and Tech Fest held on 3/10/2017 and 6/10/2017.
- Dr. Umesh K. Bhalekar has honor as Chief Guest for poster competition at S.K. College, Akola.
- Dr. Umesh K. Bhalekar worked as Senior Supervisor in Entrance Examination held by YASHADA Pune.
- Dr. Umesh K. Bhalekar has Participate n presented a poster in National conference on Recent Advances in chemical science at Akola dated on 26<sup>th</sup> and 27<sup>th</sup> Feb 2018.
- The faculty & researchers of the department are actively involved in Paper publications and Paper presentations and keeps on attending various National and International conferences.
- Dr. Harish Malpani selected for participation in India International Science festival in the category of Young Scientist, Dated on 13-16 October 2017 At Anna University Chennai.

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- Dr. Harish Malpani has worked as a judge for district level Science Exhibition organized by Govt. of Maharashtra on dated on 10<sup>th</sup> December 2017 at Khandelwal School, Akola.
- Dr. Harish Malpani has worked as a judge for Science Exhibition on the theme "FOOD FOR ALL" on 7<sup>th</sup> December 2017.
- Dr. Harish Malpani delivered invited lecture on Goodness of Microorganism in one day workshop EUREKA jointly organized by state institute of Science education Nagpur and R L T College of Science, Akola on 25<sup>TH</sup> November 2017.
- Dr. Harish Malpani has participated and attended One Day Workshop on NAAC Assessment and Accreditation Process dated on 23<sup>rd</sup> July 2017.
- Dr. Harish Malpani has Participate in poster session in DBT Sponsored National Conference on Recent Trends in Biotechnology and Biodiversity held on 22<sup>nd</sup> and 23<sup>rd</sup> September 2017.
- Dr. Harish Malpani has participated n presented a poster in National conference on Recent Advances in chemical science at Akola dated on 26<sup>th</sup> and 27<sup>th</sup> Feb 2018.
- Ms. Sonali Gawande has participated and attended One Day Workshop on NAAC Assessment and Accreditation Process dated on 23<sup>rd</sup> July 2017.
- Ms. Sonali Gawande has participated in poster session in DBT Sponsored National Conference on Recent Trends in Biotechnology and Biodiversity held on 22<sup>nd</sup> and 23<sup>rd</sup> September 2017.
- Ms. Sonali Gawande Participated and attended One Day University level Workshop on Pursuing Research in New Contexts at SGBAU, Amravati Dated on 12<sup>th</sup> August 2017.
- Ms. Sonali Gawande has participated International Conferences on Frontiers in Life and Earth Science held at Pune dated on 18-19 January 2018.
- Ms. Sonali Gawande has Participate n presented a poster in National conference on Recent Advances in chemical science at Akola dated on 26<sup>th</sup> and 27<sup>th</sup> Feb 2018.
- Two Post Graduation students; and Ms. Sarika Surwade and Ms. Sneha Wankhede (M. Sc. II); have grabbed the 1<sup>st</sup> Merit and 2<sup>nd</sup> Merit positions in M. Sc Microbiology exams of SGB Amravati University, Amravati.
- Ms. Kanchan Mangtani participated in National level working model and poster presentation on "Innovative technologies for Rural Development in India".
- Ms. Kanchan Mangatani (M.Sc. I) secured 2<sup>nd</sup> prize in Technothlan 2K17 GO GREEN Technical Poster Presentation held at College of Engineering and Technology, Akola dated on 10<sup>th</sup>-11<sup>th</sup> October 2017.
- Ms. Shruti Joshi, Ms. Manisha Dhore, Ms. Harsha Agrawal, Ms. Shreeya Relkar, Ms. Mrunali Kashid, Ms. Dnyaneshwari Hatolkar, Ms. Ruchika Dhole (P.G.), Ms. Apurva Shah, Ms. Shivani Tiwari (U.G.) were qualified at district level and selected for University level Avishkar 2017 at SGBAU Amravati



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- Students of the department enthusiastically participate in extra-curricular activities like Seminars, Education tours, etc. An educational tour was schematized by the department to Mahan Water Purification Plant. Total 87 students of B.Sc. III joined for the educational tour on September 9, 2017 and For the betterment of student tour of B.Sc. III sem VI student was organized to Govt. Milk Scheme (RA) dated on 20<sup>th</sup> Feb. 2018.
- Educational tour of M.Sc Microbiology students was organized on 8<sup>th</sup> Feb 2018 to Cotton Research Institute Nagpur. Total 25 student of M.Sc Microbiology student joined for tour.
- On 27<sup>th</sup> Feb. 2018, total 139 student of B.Sc. I Sem II visited Nagarjuna botanical garden PDKV, Akola.
- Department of Microbiology in association of Microbiology Society of India organized Virtual lectures frequently. Dr. A.M. Deshmukh delivered lecture on Genetically Modified food dated on 11/9/2017 and Dr. Trupti Gokhale delivered lecture on Biosensors dated on 27/9/2017.
- Discharging the noble responsibilities towards the society, the Department actively participates & conducts the Blood Donation & Blood Grouping Camps and Thallesemia detection camp. The department aided and sponsored the blood grouping of around 163 students on 24<sup>th</sup> December 2016 in memory of Late M.G. Joshi Sir and at Village Sonala respectively.
- More than 40 students of B.Sc. I, II & III participated in 17<sup>th</sup> State Level Microbiology Quiz Contest organized by R.C. Patel College, Shirpur.
- Ms. Prajкта Deshmukh and Ms. Ashwini Mohod of B.Sc. II were the Winner of Microbioslate – An Essay Competetion in 17<sup>th</sup> State level Microbiolympiad at R.C. Patel Arts, Commerce and Science College, Shirpur.
- The students are encouraged for good work in different fields and duly awarded for their bright accomplishment every year on Republic Day.
- All the students of UG and PG program participated in an event on Career Counseling organized by Career & Counseling Cell of the college.
- Microbiology students activity MICRANS were Inaugurated by Dr. Murlidhar Chandekar, Vice chancellor of SGBAU, Amravati dated on 19/8/2017.
- Dr. Vinit Varthe delivered a Guest lecture on Thallesemia dated on 11/9/2017 more than 400 students were actively participated.
- Department always strives for the betterment of students. Department has collaborated with Microbiologist Society India & has founded MICRANS unit of RLT Microbiology, this year too. For the welfare of society, the MICRANS unit has organized the Blood grouping and Hemoglobin estimation camp.

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- Department of Microbiology in collaboration with MICRANS unit of RLT Microbiology celebrates the National Science Day and on this occasion poster competition for B.Sc. II year was organized on topic "My Health My Responsibilities" on date 28<sup>th</sup> Feb. 2018.
- The Department has on-going 19 Dissertation Projects.
- The Department also runs Career Oriented Program (COP), approximately 100 students are admitted to various COP Programs like CCLT/ DCLT and ADCLT.

- **EDUCATIONAL TOUR :**

In the session 2017-18 department of Microbiology have organized total 4 tours for betterment of students. These tours were organized as per curriculum and needs of students.

1. **Mahan water purification plant** :- Tour of B.Sc. Final year student was organized to Mahan water purification plant on date 16/09/2017. In this study tour total 87 students of B.Sc III along with Dr. U.K. Bhalekar, Dr. H.S. Malpani and Ms. S.N. Gawande were present for tour. B.Sc III sem V syllabus mainly deals with water purification techniques and procedures. To observe actual water purification process was great feast for students. Various steps of purification like Sedimentation, Flocculation, Chlorination, Back washing were demonstrated to students.
2. **Govt. Milk Scheme (RA)** :- For the betterment of student tour of B.Sc. III sem VI student was organized to Govt. Milk Scheme (RA) dated on 20<sup>th</sup> Feb 2018 .There was total 87 student of B.Sc. Final year student along with Dr. U.K. Bhalekar and Ms. S.N. Gawande was present for tour. Pasteurization of Milk, MBR Test, phosphatase test, Fat percentage, production of toned milk and quality of milk etc. were the various steps in Processing in milk were demonstrated to student.
3. **Cotton Research Institute Nagpur** :- Educational tour of M.Sc Microbiology students was organized on 8<sup>th</sup> Feb 2018 to Cotton Research Institute Nagpur. Total 25 student of M.Sc Microbiology along with Dr. H.S. Malpani visited institute. Various instrument and techniques were demonstrated to students by scientist of cotton research institute. In back journey students enjoyed at Fun and Food water park Nagpur.
4. **Nagarjuna Botanical garden PDKV** :- On 27<sup>th</sup> Feb 2018 student of B.Sc I Sem II visited Nagarjuna botanical garden PDKV Akola. Total 139 students with along with Dr. U.K. Bhalekar, Dr. H.S. Malpani and Ms. S.N. Gawande were present for tour. Various Medicinal plants and their applications were studied by students.

## MICRANS

*(Microbiology Innovative Creations by Research Array for Nobel Scholars)*

MICRANS is a society formed by the collaboration of Department of Microbiology, Shri R.L.T College of science, Akola and Microbiologist Society India. MICRANS aims to bring the academic knowledge of students on a social level. It encourages the students towards welfare of common people. MICRANS guides the students to assist the society about health prospective.

Following activities were organized and conducted successfully by the department of microbiology and biochemistry under MICRANS in association with microbiologist society India.

- **Inauguration of MICRANS Unit** :- [Saturday, 19-08-2017] - MICRANS was inaugurated by Dr. Murlidhar Chandekar [V.C. of SGBAU Amravati], Dr. V.D. Nanoty and all the members were felicitated. Dr. U.K. Bhalekar, Dr. Harish Malpani, Ms. Sonali Gawande guided student in the event.
- **Blood Grouping** :- [24-12-2017] - Late principal M.G. Joshi Memorial Day was observed as Blood grouping day. Blood sample was collected by microbiology student under the guidance of expert's team. Total 163 blood grouping were done by the members of MICRANS.
- **Thallemia Detection Camp** :- [24-12-2017] - MICRANS unit organized Thallemia detection camp under guidance of Akola Thallemia society and total 169 blood samples were collected for further testing.
- **National Science day** :- [28-02-2018] - Department of Microbiology in collaboration with MICRANS unit of RLT Microbiology celebrates the National Science Day and on this occasion poster competition for B.Sc. II year was organized on topic "My Health My Responsibilities". Around 120 students participated in the event.

**Dr. Umesh K. Bhalekar**  
Head, Department of Microbiology  
In-charge, P.G. Dept. of Microbiology

**DEPARTMENT OF PHYSICAL EDUCATION**

**REPORT**

Teams participated in Inter Collegiate Tournaments & Selection Trials. The following students participated in following events.

Sr. No.	Name of Students	Class	Sports & Youth Festival
1	Nilkhan Nikhil S.	B.Sc.I	Chess
2	Janjal Vishal R.		Cross Country
3	Dofe Partik G.		Taekwondo
4	Somwanshi Jay M		Taekwondo
5	Potey Ruchiket A.		Judo, Wt. & Power Lifting
6	Telgote Dipankar R.		Judo
7	Mehare Akash R.		Volleyball, Kabaddi
8	Sawale Ankit R.		Volleyball
9	Mawale Mangalkumar		Volleyball, Kabaddi
10	Talokar Rushikesh S		Volleyball, Kabaddi
11	Dhore Rushikesh P.		Volleyball, Kabaddi
12	Mahalle Nana P.		Volleyball
13	Wankhade Shumbham		Volleyball
14	Ingle Shivam G.		Volleyball
15	Nikole Akshay R.		Volleyball
16	Vilhekar Pritesh D.		Volleyball
17	Dahibhate Shayam S.		Athletics
18	Gawande Mahesh G.		Kabaddi
19	Dange Rohit G.		Badminton
20	Dharmode Pawan D.		Badminton
21	Pujara Harsh C.		Badminton
22	Pawar Anjali V.		Badminton
23	More Nikita B.		Badminton
24	Sanghai Damini D.		Badminton
25	Sulkar Vaibhav V.	B.Sc.II	Chess
26	Kakade Akash R.		Cross Country
27	Joshi Hitesh V.		Taekwondo

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28	Ingle Pranil S.	B.Sc.II	Taekwondo	
29	Murtadkar Shyam S.		Judo, Kabaddi	
30	Mhasaye Abhijit S		Judo, Kabaddi, Wrestling	
31	Khandare Kunal S.		Judo, Wrestling	
32	Gite Tushar H.		Judo	
33	Deshmukh Prajka V.		Judo	
34	Kalalkar Priya S.		Judo, Wrestling	
35	Shinde Shubham H.		Badminton	
36	Damodar Sachin B.		Badminton, Table Tennis	
37	Vidyasagar Yash D.		Badminton	
38	Varma Ghanshyam D.		Table Tennis	
39	Akot Gaurav R.		Table Tennis	
40	Bais Harshal A.		Table Tennis	
41	Jadhao Shivani M.		Judo, Wrestling	
42	Khawane Swaraj R.		Volleyball	
43	Karale Vaibhav K		Weight & Power Lifting	
44	Khendkar Akash B.		Kabaddi	
45	Raut Godavari M.		Wrestling	
46	Miskin Sachin D.		B.Sc.III	Chess
47	Chitrang Shivam G.			Chess
48	Kaware Datta S.	Chess		
49	Nage Prashant P.	Taekwondo		
50	Rathod Vishal D.	Taekwondo		
51	Ambuskar Nikita G.	Judo, Wrestling		
52	Gondchaware A.V.	Volleyball, Kabaddi		
53	Thakur Suraj D.	Athletics		
54	Karale Dattatray V.	Athletics		
55	Kothale Sachin S.	Athletics		
56	Unhale Mohan P.	Kabaddi		
57	Gawai Karika D.	Wrestling		
58	Nerker Tejal D.	Badminton		

### Players Selected for Selection Trial from Inter Collegiate Tournament

- |    |                 |         |           |
|----|-----------------|---------|-----------|
| 1. | Vaibhav Sulkar  | B.Sc.II | Chess     |
| 2. | Yash Vidyasagar | B.Sc.II | Badminton |

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### Players Selected for Selection Trial from College

1.	Trupti Bhagat	B.Sc.II	Table Tennis
2.	Pratiksha Lunge	B.Sc.I	Table Tennis
3.	Archana Giri	B.Sc.I	Kabaddi
4.	Abdul Danish	B.Sc.III	Football
5.	Saurabh Ingle	B.Sc.II	Football
6.	Suraj Thakur	B.Sc.III	Hockey

### Achievements of Students

Sr. No.	Name	Class	Achievements
1	Ms. Tejal Nerkar	B.Sc.III	<p><b>Colour Coat in Badminton</b> Participated in West Zone Inter University Tournament held at North Maharashtra University, Jalgaon from 19.12.2017 to 23.12.2017.</p>
2	Ms. Nikita Ambuskar	B.Sc.III	<p><b>Colour Coat in Judo (63 Kg. &amp; 78 Kg. above Open Weight Category)</b> Participated in All India Inter University Tournament held at Tilak Maharashtra Vidyapeeth, Pune from 05.11.2017 to 07.11.2017.</p> <p><b>Colour Coat in Wrestling (62 Kg. Wt. Category)</b> Participating in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak from 03.11.2017 to 05.11.2017.</p>
3	Ms. Godavari Raut	B.Sc.II	<p><b>Colour Coat in Wrestling (55 Kg. Wt. Category)</b> Participating in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak from 03.11.2017 to 05.11.2017.</p>
4	Ms. Shivani Jadhao	B.Sc.II	<p><b>Colour Coat in Wrestling (57 Kg. Wt. Category)</b> Participating in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak from 03.11.2017 to 05.11.2017.</p>
5	Ms. Priya Kalalkar	B.Sc.II	<p><b>Colour Coat in Wrestling (50 Kg. Wt. Category)</b> Participating in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak from 03.11.2017 to 05.11.2017.</p>

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6	Mr. Vaibhav Karale	B.Sc.II	<b>Colour Coat in Power Lifting (83 Kg. Wt. Category)</b> All India Inter University Tournament is scheduled to be held at Panjab University, Chandigarh from 08.02.2018 to 11.02.2018.
7	Mr. Ruchiket Pote	B.Sc.I	<b>Colour Coat in Power Lifting (120 Kg. above Wt. Category)</b> All India Inter University Tournament is scheduled to be held at Panjab University, Chandigarh from 08.02.2018 to 11.02.2018.
8	Ms. Karika Gawai	B.Sc.III	<b>Bronze Medal in Wrestling</b> in Inter Collegiate Wrestling Tournament held at Smt. R.S. College, Ajangaon Surji
9	Mr. Dipankar Telgote	B.Sc.I	<b>Bronze Medal in Judo</b> in Inter Collegiate Judo Tournament held at D.C.P.E., Amravati HVPM
10	Ms. Prajakta Deshmukh	B.Sc.II	<b>Bronze Medal in Judo</b> in Inter Collegiate Judo Tournament held at D.C.P.E., Amravati HVPM
11	Mr. Pratik Dofe	B.Sc.I	<b>Bronze Medal in Taekwondo</b> in Inter Collegiate Taekwondo Tournament held at Dr. B.R. Ambedkar College, Amt.
12	Mr. Vaibhav Sulkar	B.Sc.II	<b>Selected for University Chess Selection Trial</b> from Inter Collegiate Chess Zone Tournament held at S.S.G.M.C. Shegaon.
13	Ms. Nikita Ambuskar Ms. Godavai Raut Ms. Shivani Jadhao Ms. Priya Kalalkar Ms. Karika Gawai	B.Sc.III B.Sc.II B.Sc.II B.Sc.II B.Sc.III	First Time in College and Akola History our College won Wrestling Women Championship 2017-2018 of Sant Gadge Baba Amravati University, Amravati and Four wrestlers awarded Colour Coat at one time in Wrestling
14	Ms. Tejal Nerkar Ms. Anjali Pawar Ms. Nikita More Ms. Damini Sanghai	B.Sc.III B.Sc.I B.Sc.I B.Sc.I	Badminton Women Team is Runner up Team in 'B' Zone Inter Collegiate Badminton Tournament of S.G.B. Amravati University, Amravati
<b>Best Sports Women</b>			
<b>Special Achievement :</b> <b>Ms. Tejal Deepak Nerkar</b>		B.Sc.III	Awarded three Colour Coat in Badminton for College 2015-16, 2016-17, 2017-18

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## Achievements of Staff

Sr. No.	Name	Designation	Achievement
1	Dr. Rajesh D. Chandrawanshi	Director (Sports and Physical Education)	Ph.D. degree awarded on 23 <sup>rd</sup> June 2017
			Member of Wrestling Men & Women, Selection Committee, Sant Gadge Baba Amravati University, Amravati
			Team Manager of Wrestling Free Style Women participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak from 03.11.2017 to 05.11.2017.
			Bronze Medals in Hammer Throw in 39th Maharashtra State Masters Athletics Meet 2017 held at Washim

### International Yoga Day

International Yoga day was celebrated on 21<sup>st</sup> June 2017. All students and staff members attended this programme.

### National Sports Day

National Sports Day was celebrated on 29<sup>th</sup> August 2017. Students were participated in Chess, Badminton, Table Tennis, Skipping Rope & Suryanamaskar events. Friendly matches of Tug of War were decently organised. Aim of this National Sports Day was to motivated students in Sports Activities.

### National Sports Day - 29<sup>th</sup> August 2017

Sr.No.	Event	Name	Class	Place
1	Suryanamaskar Women	Ms. Godavari Raut (58)	B.Sc.II	First
2		Ms. Nikita Ambuskar (51)	B.Sc.III	Second
3		Ms. Shivani Jadhav (29)	B.Sc.II	Third
4	Suryanamaskar Men	Mr. Sachin Kothale (62)	B.Sc.III	First
5		Mr. Tushar Gite (62)	B.Sc.I	First
6		Mr. Surajkumar Sharma (37)	B.Sc.II	Second
7		Mr. Vishal Janjal (33)	B.Sc.I	Third
8	Table Tennis Women	Ms. Pratiksha Lunge	B.Sc.I	First
9		Ms. Poonam Tayde	B.Sc.II	Second
10	Table Tennis Men	Mr. Vishal Pawar	B.Sc.II	First
11		Mr. Harshal Bais	B.Sc.II	Second
12	Badminton Women	Ms. Tejal Nerkar	B.Sc.III	First
13		Ms. Bhagyashree Sawarkar	B.Sc.I	Second
14	Badminton Men	Mr. Harshal Thosar	XI	First
15		Mr. Aditya Khotte	XII	Second
16	Chess M & W	Mr. Vibhav Sulkar	B.Sc.II	First
17		Mr. Sachin Miskin	B.Sc.III	Second



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18	Run Run Women	Ms. Nikita Ambuskar	B.Sc.III	First
19		Ms. Shivani Jadhav	B.Sc.II	Second
20	Run Run Men	Mr. Lalit Rakhonde	B.Sc.II	First
21		Mr. Rushikesh Surwarde	B.Sc.II	Second
22	Skipping Rope Women	Ms. Sonali Kulat (150)	B.Sc.I	First
23		Ms. Ishwari Hingane (123)	B.Sc.I	Second
24		Ms. Damini Sanghai (120)	B.Sc.I	Third
25	Skipping Rope Men	Mr. Datta Karale (725)	B.Sc.III	First
26		Mr. Shivshankar Tale (691)	B.Sc.I	Second
27		Mr. Rushikesh Surwade (471)	B.Sc.II	Third
28	Tug of War Women	Ms. Damini Sanghai	B.Sc.I	First
29		Ms. Pooja Muley	B.Sc.II	
30		Ms. Pranali Manwar	B.Sc.I	
31		Ms. Sonali Kulate	B.Sc.I	
32		Ms. Mayuri Tikhode	B.Sc.II	Total Wt. 329 Kg.
33		Ms. Anjali Sardar	B.Sc.II	
34		Ms. Ashwini Shinde	B.Sc.I	Second
35		Ms. Ruchita Kakade	B.Sc.I	
36		Ms. Bhagyshree Sawarkar	B.Sc.I	
37		Ms. Supriya Kshirsagar	B.Sc.I	
38		Ms. Ritu Vishwakarma	B.Sc.II	Total Wt. 346 Kg.
39		Ms. Kalyani Sangade	B.Sc.I	
40		Ms. Priya Karale	B.Sc.II	First
41		Mr. Vishal Rindhe	B.Sc.III	
42	Mr. Abhijit Gondchawar	B.Sc.III		
43	Mr. Akshay Nikhade	B.Sc.III		
44	Mr. Sachin Kothale	B.Sc.III		
45	Mr. Mohan Unhale	B.Sc.III	Total Wt. 355 Kg	
46	Mr. Bhagwan Pawar	B.Sc.III		
47	Mr. Tushar Gite	B.Sc.II	Second	
48	Mr. Rishikesh Dewar	B.Sc.II		
49	Mr. Sahil Tadas	B.Sc.I		
50	Mr. Shyam Murtadkar	B.Sc.II		Total Wt. 359 Kg.
51	Mr. Vishal Mahnik	B.Sc.II		
52	Mr. Surajkumar Sharma	B.Sc.II		

### University Level Inter Collegiate Badminton (Women) Tournament

S.G.B. Amravati University's Inter Collegiate Badminton Tournament (Women) was organized on 10<sup>th</sup> & 11<sup>th</sup> November 2017. In this championship 45 Women participants of 12 colleges were participated.

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## Physical Efficiency Test

The Physical efficiency Test was conducted in the month of January & February 2018. 119 Students from B.Sc.I & II participated in this test. Result of this test is as follows.

	A Grade Certificates	B Grade Certificates
For Men	07	13
For Women	15	60

## Sports Adventure Tour

This tour visited Ajanta Caves and Jadhicha Dev on 23<sup>rd</sup> January 2018. In this tour 168 students of college & 07 staff members participated.

## Medical Examination

Medical Examination 2017-18 was conducted in the month of March 2018. 183 Women & 94 Men have attended this examination.

## Self Defense Academy (Innovative Practice)

Karate is an ancient art of self-defense. Now a day's Karate is recognized as sports. In modern era women's are facing so many problems in society and also have golden opportunities in discipline jobs. Karate is most useful for women's to develop their physical fitness and self-defence techniques. For the karate player physical fitness is must. So that the karate training include stretching exercise, running, warm up, punching, kicking, blocking, breaking technique and real combat. This hard training develops muscular power, stamina, endurance, flexibility, agility of strength of player. Aim of this activity is to develop self defense skill with physical fitness among the students specially for girls.

## Extension Work - Physical Fitness Training Classes (Best Practice)

Physical fitness training Classes and Police, Army, Air force, Navy, BSF, CRPF, CISF, BSF etc. these Job's related physical fitness training classes successfully conducted at Vasant Desai Stadium, Akola in morning session. 45 Male and Female Students or Job Seekers are taking benefit of this physical fitness training classes in free of cost. At the time of this classes so many other student, job seekers, male & female also taking suggestions about fitness and proper fitness schedule of exercises and diet. This activity fully devoted for social work and social responsibility.

## Sports Committee Members :

1. Mr. R.D. Chandrawanshi .... Chairman
2. Dr. R.L. Rahatgaonkar .... Member
3. Prof. V.N. Badgujar .... Member
4. Prof. S.B. Tadam .... Member

**Mr. Rajesh D. Chandrawanshi**

Director  
Physical Education

## DEPARTMENT OF PHYSICS

### REPORT

In this academic session 2017-18 two new teaching staff member namely Dr. R. M. Agrawal and Shri S. R. Jaiswal joined as a Assistant Professor in the Physics department. Prof. P. P. Gedam, Prof. Dr. R. M. Agrawal and Prof. S. R. Jaiswal got their research paper published in different international Journal related to subject Physics and its various branches. They also presented their research papers in different conferences of University, National and International levels. Dr. R. M. Agrawal bagged second prize in Poster Presentation competition in the International Conference on "Applied Nanotechnology and Nanoscience" (ICANN-2017) held at Baramati Dist. Pune.

The students offering subject Physics participated in different activities such as Sky Observation Club (SOC) of the college under the guidance of Prof. S. R. Jaiswal of Physics department who is also the member of SOC committee. Ku. Sayali Jagtap of B.Sc.-III and Ku. Sapna Arabe and Ku. Bhavana Choudhary of B.Sc.-II participated in the competition in the University level seminar held at Shri Shivaji Science College, Amravati. Among these Ku. Sayali Jagtap bagged Second prize Ku. Priya Wankhade of B.Sc.-III participated in state level Avishkar competition and secured second prize.

National Science day was celebrated in Department of Physics on 28<sup>th</sup> Feb. 2018. In this programme Hon'ble Principal Dr. V.D. Nanoty was Chairman and Dr. S.W. Bhawre H.O.D of Mathematics department was Chief guest, Prof. M.S. Tapi H.O.D department of Physics highlighted the life sketch of renowned scientist and Nobel laureate Bharat ratna "Dr. C.V. Raman". He also spoke about the discovery "Raman effect".

The seminar competition and poster presentation competition for students was also held on this occasion Ku. Rani B. Khuraniya of B.Sc.I bagged first prize while Ku. Priti Devidas Thakare of B.Sc.III bagged second prize in the seminar competition. Ku. Vaishnavi Gahtol and Ku. Namrata Poganty of B.Sc. II bagged first and second prize respectively in the Poster presentation competition on this occasion.

**Prof. M.S. Tapi**  
Hon. Head  
Department of Physics

## DEPARTMENT OF ZOOLOGY

### REPORT

### ZEBRA

(Zoology Education By Research Activity)

#### A) INSTITUTIONAL VISIT :

- CLASS : B.Sc.–III
- PLACE : ENTOMOLOGY MUSEUM, DEPARTMENT OF ENTOMOLOGY, PDKV, AKOLA
- DATE : 6/10/2017

On 6<sup>th</sup> October Institutional Visit of B.Sc. students was organised at **Insects Museum at Entomology Department, Dr.Panjabrao Krishi Vidhyapith, Akola**. Dr. S.M. Dadmal , Asso. Prof and Incharge of Insect Museum guided the students about insect taxonomy, classification, morphological and economical aspects of the Insect. He also gave handful practical to handle the insects and use of instruments for insects study. Students visited the museum and collected all related information which was needed in their syllabus. Students also visited the culture centre of Useful insect Trychograma, which is a egg parasite insects helpful for pest control. Students visited pest control centre and collected information related to it. All students and staff after the breakfast at campus returned to the college. Institutional Visit was organised by HOD Dr. S. M. Nagrale with other teaching Dr A. S. Sawarkar, Dr R.P. Joshi madam and non teaching staff. Overall 90 students were participated in the visit.

#### B) EDUCATIONAL TOUR :

- CLASS : B.Sc.–III
- PLACE : SALBURDI AND FOREST DEPARTMENT WILD LIFE NATURE GARDEN , MORSHI
- DATE : 6/2/2018

Zoology Department was organised Excursion and Education Tour for B.Sc. Final Year students at Salburdi and Forest Department Wild Life Nature Garden and Interpretation Centre, Morshi on 6<sup>th</sup> Feb. 2018. Overall 53 students and 6 Teaching and Non Teaching staff were participated for the Tour. Students visited to the holy place Salburdi by doing nature trail and to understand the Nature and Its importance for the spiritual ways. Students visited Holy place Cave of Shiva and other natural important places.

While return journey, students were visited to Wild Life Nature Garden of Forest Department at Morshi. They visited Wild Medicinal Plants Centre and Wild Life Nature Interpretation Centre to collected information of medicinal plants and role of wild life for nature protection and forest conservation.

With the permission of Principal Dr. V.D. Nanoty and under the guidance of HOD Dr. S.M. Nagrale study tour was organised and all staff takes efforts for success of the tour.

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### C) EDUCATIONAL TOUR : Field Visit at Katepurna Wildlife Sanctuary

- CLASS : B.Sc.–II
- PLACE : Katepurna Wildlife Sanctuary, Akola
- DATE : 9/2/2018

The “Biodiversity Walk and Nature Study Tour” at Katepurna Wildlife Sanctuary on Date 09/02/2018 was organized by Department of Zoology, Shri R.L.T. College of Science, Akola in collaboration with Forest Department, Akola. The field visit was arranged as per the syllabus of Practical of B.Sc. II / Semester IV S.G.B. Amravati University, Amravati.

The “Nature’s Trail” the “Biodiversity Quiz competition” was conducted for the students. The 50 students were divided into two batches of each having 25 students. Each batch was further divided into 5 groups and every group was named after the name of birds. For eg. Peacock group, Pigeon group, Hariyal group and so on. Dr. Rashmi Joshi Sawalkar and Mr. Suraj Ghogre(Forest Guide) worked as the jury members for the quiz to select the winner groups. At the end of the visit the valedictory programme was conducted by Dr. Joshi in which the winner groups of the quiz were felicitated by giving them the certificates. The staff members Dr. Rashmi Joshi Sawalkar, Dr. Sudhir R. Kohchale and Dr. Archana S. Sawarkar organized the visit as well as Quiz competition.

With the permission of Principal Dr. V.D. Nanoty and HOD Dr. S.M. Nagrale under the guidance of Faculty incharge Dr. A.S. Sawarkar study tour Field Visit was organised and all staff takes efforts for success of the tour.

### GUEST LECTURES :

1. Guest lecture of Prof Dr. P.S. Dhabe , Asst Prof abd Head , Department of Zoology, Shankarlal Khandelwal College Akola was organized students by Zoology Department on the topic “Aquaculture : Social and Economic values” on dated 7/10/2017 for B.Sc.III as per the syllabus. Prof. Dr. P.S. Dhabe madam guided the students about Aquaculture, Fish biodiversity, its economic values and social status. She also guided about fish culture, fish selection types of fish ponds, breeding, nursing, rearing and stocking.

Dr. S.M.Nagrale introduced about the Guest and remarked Vote of Thanks. Dr. A.S. Sawarkar and Dr. Rashmi Joshi Sawalkar madam and all B.Sc III students were present for the lecture.

2. International Ozone Day (16/09/2017) was observed by department and organizing Guidance lectures series.

a) Dr. Hemant P. Sapkal, Shri Shivaji College, Akola guided on topic “Caring for all life under the Sun”. In his lecture he guided about importance of sun and Ozone layer protecting the life on Earth. He also guided of Ozone layer and its depletion due to air pollution and its harmful effect on Earth life.

b) Mr. Mangesh R. Ubale, Librarian, Shri R.L.T. College of Science, Akola gave lecture on “Importance of Digital Library”. On the same occasion, ‘Digital Gallery of Museum Specimen’ which was prepared by Dr. Archana Sawarkar and Dr. Sudhir Kohchale was inaugurated and

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handed over to the library. In his speech Mr Ubale guided about e library: its paperless work and readily viability due to today's progressive work on technology.

Both series of lectures organised by departments under the guidance of Principal, HoD and coordinated by Dr. A.S.Sawarkar

### DEPARTMENTAL ACTIVITIES :

#### A) Self Governance Day : Student's Seminar (5<sup>th</sup> September 2017)

On the occasion 'Teachers Day' on 5<sup>th</sup> Sept Self Governance Day observed by Department of Zoology. Student's seminar competition organized in the department for B.Sc. Students apart from the regular program of the college. Total Fifteen students participated and delivered seminar on the topics of Zoology included in syllabus. All students and staff of department actively participated in the program. Those who actively delivered their seminar they were selected and felicitated by awards of 1<sup>st</sup> and 2<sup>nd</sup> prize, Those who participated in seminar were awarded by certificates.

All staff and students actively participated in the **Self Governance Day** program organized by the college and **Students Seminar Competition** conducted by the Department.

#### B) Digital Gallery of Museum Specimens : (16<sup>th</sup> September 2017)

Under the guidance of Dr Archana Sawarkar and Dr. Kohchale **Digital Gallery of Museum Specimens** was prepared by the Department. The soft copy format of the museum specimens was used as an innovative learning resource for B.Sc. Students. The soft copy in the form of Disc handed over to the Librarian Mr. Mangesh Ubale for deposited it to the College Library for further references to the students.

#### C) World Ozone Day Celebration : (16 September 2017)

Rangoli Competition cum exhibition organised by the department under the guidance of Dr Sawarkar Madam, on the occasion World Ozone Day. The competition was inaugurated by Dr Poonam Agrawal Madam, HOD Chemistry Department under the Presidential presence of Dr S.W. Bhaware, HOD Mathematics Department. Degree college students actively participated in the activity. The theme of Rangoli competition was Ozone Depletion, its effects and prevention. For the competition Prof Sujata Tadam Madam and Dr. Anjali Sangole Madam worked as a Jury member. Winner students were felicitated by awards and certificates.

#### D) Wild Life Conservation Week Program : (1-7 October 2017)

Every year Department of Zoology under ZEBRA cell observe **Wild Life Conservation Week** on **1-7 October Week**. During the week many motivating and students informative programs were conducted by the department. To provide information related nature conservation, wild life conservation and their role in environment, guest lectures and documentary movies presented for the students.

On **1<sup>st</sup> October** inauguration of wild life conservation week was conducted. On this occasion Asst Prof. and Head Dr.S.M.Nagrале guided the students about the wild life conservation in his speech. Documentary movie show on "**Save the Tiger**" was arranged for the students B.Sc.I students in the College Auditorium. All students enjoyed the Documentary. After the show Dr. S.M. Nagrale interacted

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to the students and guided them about the wild life and their need of conservation for our better future. For the success of Program all the faculties of the department had take their hard efforts.

### **E) Eureka : Students Guidance program (25 November 2017)**

One day workshop "EUREKA" was organized by Shri R.L.T. College of Science, Akola for school students & teachers in association with State Institute of Science, Nagpur and Education Department Z.P. Akola. In the last session of workshop all the participants visited the department where information about the animal's specimens and models, human skeleton etc was given. There was interaction between students, teachers and staff of Zoology Department. 'Aptitude test' was conducted on the given information to them from every department. Dr. Rashmi Joshi Sawalkar conducted the Students guidance activity in the Department and guided the students

### **F) Zoology Aptitude Test : (24 January 2018)**

To improve the objective aptitude knowledge of Zoology subject, Department under the guidance and supervision of HOD, Dr. S.M. Nagrale conducted Zoology Aptitude Test for B.Sc.III students. Overall 60 students are present for the test. All staff were provides their support for the success of the events. Three students on the basis of higher scoring selected and ranked as 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> respectively and awarded by certificates.

### **G) Biodiversity Calendar : (26 January 2018)**

To know the value of Biodiversity and Inculcate environment consciousness, Biodiversity Calender -2018 was prepared and published B.Sc.II Students under the supervision of Dr Archana Sawarkar and Dr. Anjali Sangole. Several activities conducted under the heading of Biodiversity through Biodiversity Calendar.

### **H) World Wild Life Day : (3<sup>rd</sup> March 2018)**

Department of Zoology celebrate World Wild Life Day on 3<sup>rd</sup> March at Zoology department lab. Students conducted program under the chairmanship of Dr. S.M. Nagrale and in the presence of Dr. Archana Sawarkar and Dr. Rashmi Joshi Sawalkar. Many students kept their view regarding to the Wild life, their conservation and Importance. Dr. Sawarkar highlighted her views on Wild life and their Biodiversity and Dr. S.M. Nagrale in his Presidential speech explain about role of Nature for wildlife and duties of Human for conservation and maintenance of Biodiversity at natural level. Program was conducted by B.Sc.III student Miss Sapana Shirsat and supported by other students and staffs of the department.

### **I) World Sparrow Day : (20<sup>th</sup> March 2018)**

Department of Zoology celebrate World Sparrow Day on 20<sup>th</sup> March at Zoology department. Students conducted program under the guidance of Dr. S.M. Nagrale. For drinking water to Sparrow, water pots were installed at Botanical Garden in college campus. Students and other staff were presents for the events. Water pots were filled with water by the students and staff. Other faculties of the college were also shows their presence for the events. Dr. Archana Sawarkar, Dr. Rashmi Joshi Sawalkar, Dr. Poonam Agrawal, Dr Kavita Heda, Dr. Anjali Sangole, Dr. Sudhir Kohchale, Prof. Shailendra Madavi and Prof. Vaishali Badgajar Madam were present for the program of Sparrow Day.

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## SOCIAL AND EXTENSION ACTIVITIES :

### 1. Dr. A.S. Sawarkar :

- 1) Worked as an Examiner for -
  - Tahasil Level Student Science Meet at G.D. Platinum Jyubeeli English School, Akola (31/07/2017).
  - Akola District Level Student Science Meet at Prabhat Kids School, Akola (28/08/2017).
  - Amravati Divisional Level Student Science Meet at Bal Shivaji Madhyamik Shala, Akola (14/09/2017).
  - 43<sup>rd</sup> Akola District Level Science Exhibition at Bhikamchand Khandelwal Vidyalaya, Akola (11/12/2017).
  - 7<sup>th</sup> District Level Inspire Award Science Exhibition at B.R. High School, Akola (15/02/2018 to 17/02/2018).
- 2) Worked as an Inaugurator of "Students Unit of Zoological Society" and Examiner for poster competition at S.K. College, Akola (15/09/2017).
- 3) Organized one day Workshop EUREKA for School Students and Teachers of Akola District and delivered talk on "Wonderful World of Spiders" (25/11/2017).
- 4) Worked as a Judge for 'Eureka'-The Science Symposium and delivered talk at School of Scholars, Akola (27/01/2018).
- 5) Worked as a Resource Person in Model Up-gradation workshop for 43<sup>rd</sup> State level Science Exhibition, organized by State Institute of Science, Nagpur, Dept. of Education, Akola at New English High school and Jr. College, Akola. (17/03/2018).

### 2. Dr. S.R. Kohchale :

1. Worked as a NSS programm officer and actively participate in NSS activity
2. Worked as a Coordinator of Blood donation Camp and Blood Checkups
3. Worked as a Coordinator of Disaster Management Club and Principal Brigade
4. Worked as a volunteer in a Morna River Cleaning Campaign

### 3. Dr. R.P. Joshi (Sawlakar) :

1. Worked as a NSS programm officer and actively participate in NSS activity
2. Worked as a Member of Blood donation Camp , Blood Checkups and other social activities conducted by college.
3. Worked as a volunteer in a Morna River Cleaning Campaign

**Dr. Sushil M. Nagrale**  
Head  
Department of Zoology



## ENVIRONMENTAL CELL

### REPORT

Environmental cell organizes various activities to aware students about conservation of Mother Earth.

On the Eve of Vanmahotstav on 01/07/2017, Environmental cell in collaboration with N.S.S., distributed saplings of various useful plants in order to save the Environment. Our Principal, Dr. V.D. Nanoty, Dr. U.K. Bhalekar, Dr. S.M. Nagrale, Mrs. V.N. Badgujar, Shri P.M. Khadse, Dr. A.A. Sangole, Dr. A.S. Sawarkar, Dr. K.M. Heda, Shri S.V. Madavi, all members of Environmental cell were present.

Similarly, on the occasion of Diwali festival, to aware students about pollution due to burning of crackers "Pradushanmukta Diwali Shapath" was given to the students on 13<sup>th</sup> Oct. 2018, in collaboration with N.S.S. Principal Dr. V.D. Nanoty, Prof. V.N. Badgujar, Dr. S.R. Kohchale, Dr. A.S. Sawarkar, Dr. Rasjmi Joshi, Shri P.M. Khadse, Dr. A.A. Sangole, Shri S.V. Madavi were present.

Wild life week was celebrated by Environment cell by various activities for "Polythene Free Environment" Holy Basil Club of Botany Dept. distributes "Cotton bags" to promote the Green Environment.

Shri S.V. Madavi arranged Documentary show Topic : "Kingdom of plants" on 8<sup>th</sup> Oct. 2017 for B.Sc.-I Yr.

On 13 Jan. 2018 in the "Morna River Cleaning Campaign" Dr. S.R. Kohchale & students of Environmental cell participated in this activity.

'Sparrow Day' on 20<sup>th</sup> March 2018, was celebrated by Environment cell in collaboration with Dept. of Botany & Zoology. Bird nest & water-pots are tied on the plants present in College campus & Botanical Garden for Birds.

**Prof. Mrs. Vaishali N. Badgujar**  
Chairman  
Environmental Cell

## SKY OBSERVATION CLUB (RLT-SOC)

### REPORT

The Sky Observation Club of Shri R.L.T. College of Science, Akola (RLT-SOC) is a college level organization working for amateur Sky lover students and Astronomy interested persons. The main objectives of SOC is that the students and the staff members of the college should know about the subject Astronomy and to create interest in it by actual observing the celestial bodies in the sky and to motivate the students towards research and knowledge in the field of Physics, Astronomy and the deep subject like General Relativity. Interested students from all the classes are made the members of the club by filling up an entry form with undertaking of attending all the sessions and various programs of night vision of celestial atmosphere were arranged for students and staff of the college.

This year 40 students are enrolled and their roll list is prepared. The regular meetings, guidance classes and various activities are held throughout the session. An 'Astronomical Gallery' was proposed to form in the college to impart the knowledge by exhibiting telescope and other astronomical objects, models and pictures for viewers.

Following are the activities of the SOC throughout the session :

- In Regular meetings the astronomy projects like Phase of the moon observation, measurement of diameter of the sun and moon were distributed to the SOC students and were guided.
- Star Dials were provided to all the observers of the club. A program on 'Setting of telescope and the use of Star-Dial' was arranged under the guidance of Dr. S.W. Bhaware, Dr. S.M. Nagrale, Prof. R.B. Ghayalkar and Prof. S.R. Jaiswal.
- On the behalf of SOC Prof. S.W. Bhaware delivered lecture on "Solar System and Universe" in a workshop entitled EUREKA 17-2018 which was jointly organized by our college with 'Akola district Science Forum' for school students and there after students visited departments and SOC's Astronomical Gallery on 25 Nov. 2017.
- SOC arranged special session on the occasion of astronomical event, Lunar Eclipse + Super Moon + Blue Moon on 31-01-2018 and observed Lunar eclipse through telescope.
- A Sky observation session was arranged on national science day 28 Feb. 2018 at 7:30 pm. The spot for Telescope setting was selected on the terrace of Wing-D. In this session the moon and the 'Star-Bright' Sirius were observed through Telescope. After that number of constellations and stars were introduced by staff members of SOC & viewers took the benefit of this programme.

**Prof. R.B. Ghayalkar**

Member

Sky Observation Club

## WOMEN'S CELL

### REPORT

The Women's Cell was formed on 05.07.17 when the regular theory and practical classes started in the academic session 2017-18. Care was taken by the Women's Cell members for the comfort of the students by providing a safe vehicle parking, maintaining the cleanliness of the campus etc.

The Principal Dr. V.D. Nanoty addressed the students of B.Sc. I on 10.07.2017 and M.Sc. I on 24.07.2017 separately to make them acquainted with the college and its rules. He stressed the importance of discipline, punctuality and hard work to acquire good grades in the University Semester Examination Pattern. The whole college premises are under observation of CCTV cameras by the principal. The suggestion box has been fixed near the Principal's office to collect girl's grievances. The Women's Cell circulated the notice for girl students to drop their suggestions, grievances in suggestion box. During this session the box was open four times in the months of August, September, January and March. Most common complaints received were about the maintenance of girl's common room and about the refill of sanitary napkins in vending machine. Complaints were conveyed to Principal and with the help of non-teaching staff complaints were resolved. Due to the Vigilance of the committee members together with all the staff members, the curricular as well as extra-curricular activities were carried out in a peaceful atmosphere in the college.

To aware all the girl students of the college about Rubella, Women's cell organized a program "**Rubella Vaccination for women**" on Friday 13<sup>th</sup> Oct. 2017 at 2.00 pm in auditorium hall of the college. President for this program was Mrs. Devyanitai Chaudhari, President, Women Welfare committee, B.G.E. Society, Akola. Gynaecologist Dr. Mrs. Bharati Rathi was invited to talk on the topic Rubella and to answer the queries of students. Ms. Kshirsagar, Mahila Bal Kalyan Vikas, Akola was invited to give the information to students about the various government schemes for vaccination. Dr. Rathi gave a very knowledgeable and important speech on this occasion. She explained the Rubella disease. She talked on its causes, its symptoms, complications and treatment. She focused on "Why Rubella vaccine is important for girls before pregnancy?". She answered the various queries of students. Ms. Kshirsagar gave the information about the various government schemes for rubella vaccination campaign. Both experts motivate the students for Rubella vaccination. In Presidential speech Mrs. Chaudhary motivate the students for Rubella Vaccination.

In Mahila Melawa at NSS camp Women's cell in collaboration with Holi Basil Club, Department of Botany organized "**Raan Bhaji exhibition**" on Tuesday 9<sup>th</sup> January 2018. The program was started with exhibition of different types of Raan Bhaji made by rural women. In this exhibition total 20 women participated. They cooked various types of Raan Bhaji. Chairperson of Women's cell Asst. Prof. Ms. S. B. Tadam was the president for this exhibition. Experts from Botany department, H.O.D. and Asst. Prof. Mrs. Vaishali Badgular and Asst. Prof. Dr. Mrs. Anjali Sangole were invited to talk on the topic Raan Bhaji and to answer the queries of students and the rural women. Dr. Archana Sawarkar, Dr.

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Poonam Agrawal, Dr. K. M. Heda were invited as chief guest for this function. Mrs. Vaishali Badgujar gave a very knowledgeable and important speech by using power point presentation on this occasion. She talked on different types of green vegetables. She focused on medicinal properties of Raan Bhaji. She answered the various queries of students and rural women. Mrs. Badgujar and Dr. Mrs. Sangole judges the Raan Bhaji made by rural women and selected best three Raan Bhaji. Winners were felicitated by prizes. In Presidential speech Asst. Prof. Ms. S. B. Tadam motivate the students and rural women for healthy diet. She encouraged the students to explore the nutritional facts about these precious vegetables.

Chairperson of Women's Cell, Asst. Prof. Ms. S.B. Tadam and member Asst. Prof. Dr. K. M. Heda participated in Swachchha Morna Abhiyaan on Saturday 10<sup>th</sup> February 2018. Women's Cell member Asst. Prof. Dr. K. M. Heda attended one day University level workshop "Bharatiya Sanskrutee Sanvardhanamadhye Striyanche Yogdaan" on Tuesday 23<sup>rd</sup> Jan. 2018 at Kisanlal Nathmal Goenka Arts and Commerce College, Karanja Lad, Dist. Washim.

**Ms. Sujata B. Tadam**

Chairperson  
Women's Cell

## ACHIEVEMENTS

### REPORT

The students and faculty members of Shri R.L.T. College of Science, Akola always actively participate in various academic as well as extra-curricular activities. The achievements of student and staff member in various fields were regularly displayed on Honour board as well as on college website. Republic day (26<sup>th</sup> January) is also celebrated as **Achievement Day**. A special programme was arranged to appreciate and felicitate the students achievers, who have won laurels for the college on the academic, sports and co-curricular front. All colour coat holders in various Sports activities and Research festival: Avishkar, were felicitated with cash prize of Rs. 1,000/- each (Total amount Rs.15,000/-), sponsored by mother institute, The Berar General Education Society, Akola. Faculty achievements are also highlighted and honoured to offer role models for the students.

Details of the achievements made over academic session 2017-18 are as under :

#### ACHIEVEMENTS OF STUDENTS

Sr. No.	Name of student	Class	Achievements
01 02	Ms. Rumaisa T. Haris Ms. Renuka V. Agrawal	M.Sc. (Maths)	Secured 6 <sup>th</sup> and 10 <sup>th</sup> position respectively in the merit list of M.Sc. (Mathematics) Summer-2017 examination of S.G.B. Amravati University, Amravati.
03 04	Ms. Farheen B. Maniyar Ms. Vrushali R. Wankhade	M.Sc. (Chem.)	Secured 3 <sup>rd</sup> and 8 <sup>th</sup> position respectively in the merit list of M.Sc. (Chemistry) Summer-2017 Examination of S.G.B. Amravati University, Amravati.
05 06	Ms. Sarika Surwade Ms. Sneha Wankhede	M.Sc.II (Micro.)	Secured 1 <sup>st</sup> and 2 <sup>nd</sup> position respectively in the merit list of M.Sc. (Microbiology) Summer-2017 Examination of S.G.B. Amravati University, Amravati.
07	Ms. Kanchan Mangtani	M.Sc.I (Micro.)	Secured 2 <sup>nd</sup> prize in National Technical Event 'Technothon 2K17...Go Green' Technical Poster Presentation Competition held at College of Engineering and Technology, Akola (10-11/10/2017).
08	Ms. Srusti P. Mate	B.Sc.I	1. Nrutyashri awardee 2. Selected Reserve in Classical Dance of Youth Festival 2017 of S.G.B. Amravati University, Amravati. 3. First Position in Classical Dance of Cultural Programme organized by Nehru Yuva Kendra Akola.

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

09	Ms. Priya Wankhade	B.Sc.III	Got Colour coat in Avishkar Research Festival-2017 from S.G.B. Amravati University and Represented S.G.B.A.U. at State level Research Festival "Avishkar" at Mahatma Fule Krishi Vidyapith Rahuri, Dist. Ahmednagar.
10	Ms. Kanchan Mangatani	M.Sc.II	
11	Ms. Insiyah D. Vora	M.Sc.II	
12	Ms. Varsha D. Yennewar	M.Sc.II	
13	Ms. Shivani Tiwari	B.Sc.III	Selected at District level and participated at University level Avishkar Research Festival-2017 under various categories.
14	Ms. Apurva R. Shaha	B.Sc.II	
15	Ms. Priya Wankhade	B.Sc.III	
16	Mr. Yash Vidyasagar	B.Sc.II	
17	Ms. Kanchan Mangatani	M.Sc.II	
18	Ms. Mrunali Kashid	M.Sc.II	
19	Ms. Insiyah D. Vora	M.Sc.II	
20	Ms. Shruti G. Joshi	M.Sc.II	
21	Ms. Varsha D. Yennewar	M.Sc.II	
22	Ms. Manisha U.Dhore	M.Sc.II	
23	Ms. Dnyaneshwari D. Hatolkar	M.Sc.II	
24	Ms. Ruchita D.Dhole	M.Sc.II	
25	Ms. Shreya N Relkar	M.Sc.II	
26	Ms. Harsha Agrawal	M.Sc.II	
27	Ms. Prajkta Deshmukh	B.Sc.II	Winners of Microbioslate – An Essay Competition in 17 <sup>th</sup> State level Microbiolympiad at R.C. Patel Arts, Commerce and Science College, Shirpur
28	Ms. Ashwini Mohod	B.Sc.II	
29	Ms. Tejal Nerkar	B.Sc.III	<ol style="list-style-type: none"> <li>1. Best Sports Women Award by college</li> <li>2. Colour Coat in Badminton</li> <li>3. Participated in West Zone Inter University Tournament held at North Maharashtra University, Jalgaon (19-23/12/2017)</li> </ol>
30	Ms. Nikita Ambuskar	B.Sc.III	<ol style="list-style-type: none"> <li>1. Colour Coat in Judo (63 Kg. Wt. &amp; 78 Kg. above)</li> <li>2. Participated in All India Inter University Tournament held at Tilak Maharashtra Vidyapeeth, Pune (05-07/11/2017)</li> <li>3. Colour Coat in Wrestling (62 Kg. Wt. Category)</li> <li>4. Participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak (03-05/11/2017)</li> </ol>

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31	Ms. Godavari Raut	B.Sc.II	1. Colour Coat in Wrestling (55 Kg. Wt. Category) 2. Participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak (03-05/11/2017)
32	Ms. Shivani Jadhao	B.Sc.II	1. Colour Coat in Wrestling (57 Kg. Wt. Category) 2. Participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak
33	Ms. Priya Kalalkar	B.Sc.II	1. Colour Coat in Wrestling (50 Kg. Wt. Category) 2. Participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak (03-05/11/2017)
34	Mr. Vaibhav Karale	B.Sc.II	1. Colour Coat in Power Lifting (83 Kg. Wt. Category) 2. Participated in All India Inter University Tournament held at Panjab University, Chandigarh (05-09/02/2018)
35	Mr. Ruchiket Pote	B.Sc.I	1. Colour Coat in Power Lifting (120 Kg. above Wt. Category) 2. All India Inter University Tournament is scheduled to be held at Panjab University, Chandigarh (05-09/02/2018)
36	Ms. Karika Gawai	B.Sc.III	Bronze Medal in Wrestling in Inter Collegiate Wrestling Tournament held at Smt. R. S. College, Ajangaon Surji
37	Mr. Dipankar Telgote	B.Sc.I	Bronze Medal in Judo in Inter Collegiate Judo Tournament held at D.C.P.E., Amravati HVPM
38	Ms. Prajakta Deshmukh	B.Sc.II	Bronze Medal in Judo in Inter Collegiate Judo Tournament held at D.C.P.E., Amravati HVPM
39	Mr. Pratik Dofe	B.Sc.I	Bronze Medal in Taekwondo in Inter Collegiate Taekwondo Tournament held at Dr. B.R. Ambedkar College, Amt.
40	Mr. Vaibhav Sulkar	B.Sc.II	Selected for University Chess Selection Trial from Inter Collegiate Chess Zone Tournament held at S.S.G.M.C. Shegaon.
41	Ms. Nikita Ambuskar	B.Sc.III	First Time in College and Akola History, our College won Wrestling Women Championship 2017-2018 of Sant Gadge Baba Amravati University, Amravati and Four wrestlers awarded Colour Coat at one time in Wrestling
42	Ms. Godavai Raut	B.Sc.II	
43	Ms. Shivani Jadhao	B.Sc.II	
44	Ms. Priya Kalalkar	B.Sc.II	
45	Ms. Karika Gawai	B.Sc.III	

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46	Ms. Tejal Nerkar	B.Sc.III	Runner up Team in 'B' Zone Inter Collegiate Badminton Tournament of S.G.B. Amravati University, Amravati
47	Ms. Anjali Pawar	B.Sc.I	
48	Ms. Nikita More	B.Sc.I	
49	Ms. Damini Sanghai	B.Sc.I	
50	Mr. Ashish Gumre	B.Sc.III	Got Colour Coat in All India Thal sena Camp at Delhi
51	Mr. Akash Nalwade	B.Sc.III	1. Got Colour Coat in All India Thal sena Camp at Delhi. 2. Gold Medal in Inter group Competition Maharashtra Directed Firing.
52	Mr. Yuvraj Bhatti	B.Sc.III	Secured Gold Medal in Health and Hygiene Competition in Thal sena Camp at New Delhi.
53	Shri. Lalit G. Rakhonde	B.Sc.II	1. Selected for Pre Republic day parade camp at Solapur. 2. Selected for State R. D. Parade At Mumbai, 2018
54	Mr. Akash R. Kakde Mr. Swaraj R. Khawne	B.Sc.II	Attended and participated in State level Avhan -2017 at Shivaji University, Kolhapur.
55	Mr. Akshay Shriram Ghope	B.Sc.II	1. Participated in state level Avhan -2017 at Shivaji University, Kolhapur and bagged runner up position. 2. Selected for National level Yuva Mahotsav-2018 which was held at Jaipur Rajasthan. 3. Declared as trainer of Disaster Management by Collector office, Akola and worked as resource person to deliver talk on Disaster Management. 4. Bagged Third prize in Slogan Competition organized by Collector Office, Akola. 5. Group leader and Best Volunteer National Service Scheme 2017-18
56	Mr. Himanshu Sunariwal	B.Sc.I	Selected for State level special residential camp held at Kalyan, Mumbai
57	Mr. Akshay Gulhane	B.Sc.I	Selected and attended State level adventure camp held at Chikhaldara.
58	Ms. Insiyah Daud Vora	M.Sc.II (Maths)	Stood at Third position in Post Graduate Inter University Seminar Competition on Algebra at Phulsing Naik Mahavidyalaya, Pusad, Dist. Yavatmal (07/02/2018)



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59	Ms. Isha Wase		
60	Ms. Jayashri Pawar		
61	Ms. Bhavana Pasarkar		
62	Ms. Vaishnavi Lande	B.Sc.III	Successfully cleared online exam on C++ Language, remotely conducted by IIT Bombay (07/03/2018)
63	Mr. Vivek Surve		
64	Mr. Harshal Gokhe		
65	Mr. Rahul Marahhe		
66	Ms. Megha Rajpal	B.Sc.II	
67	Ms. Sayali G. Jagtap	B.Sc.III	
68	Ms. Sayali G. Jagtap	B.Sc.III	1. 1 <sup>st</sup> Prize in Intercollegiate University level Seminar Competition organized by AUCTA. 2. Second prize in Practical demonstration & presentation competition at Shri Shivaji Science College of Amravati.
69	Ms. Nisha R. Chatarkar	B.Sc.III	Won consolation prize of Rs. 500/- in a district- level essay writing competition, organized by Nehru Yuva Kendra & S. K. College, Akola. (19/01/ 2018)
70	Ms. Payal R. Sonawane	B.Sc.II	Secured 1 <sup>st</sup> and 3 <sup>rd</sup> position respectively in Intercollegiate Rangoli Competition organized jointly by ZEBRA Cell and NSS Unit of college on occasion of International Day for preservation of Ozone layer (16/09/2017)
71	Ms. Pranali S. Patil	B.Sc.II	
72	Ms. Rohini Shelwane	B.Sc.II	1. Bagged Second prize in Debate Competition on voter's awareness organized by Collector Office, Akola. 2. Group leader and Best Volunteer National Service Scheme 2017-18
73	Ms. Roshni Nitin Kale	B.Sc.III	Declared as trainer of Disaster Management by Collector office, Akola.
74	Ms. Ketki Kshirsagar	B.Sc.I	Bagged 1 <sup>st</sup> and 2 <sup>nd</sup> prize respectively in Slogan Competition on voter's awareness organized by Collector Office, Akola.
75	Ms. Payal Sonavne		
76	Mr. Mahesh Janjal	B.Sc.I	Bagged 1 <sup>st</sup> and 3 <sup>rd</sup> prize respectively in Debate Competition on voter's awareness organized by Collector Office, Akola.
77	Ms. Pragati Nawalkar		

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78	Ms. Gayatri Dhombre	B.Sc.I	Bagged 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in Rangoli Competition on voter's awareness organized by Collector Office, Akola.
79	Ms. Ashwini Rudrakar	B.Sc.II	
80	Ms. Pallavi Bansute	B.Sc.I	
81	Ms. Prajakta Deshmukh	B.Sc.I	Bagged 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in Essay writing Competition on voter's awareness organized by Collector Office, Akola.
82	Ms. Pratiksha D. Lunge		
83	Mr. Shreyas S. Ingle		
84	Ms. Prerana Ubale	B.Sc.I	Secured 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> , consolation position and cash prize of Rs. 500/-, Rs. 300/-, Rs. 200/-, Rs. 100/- respectively in "Exhibition cum Competition of Edible Fruits Collection" organized by Dept. of Botany.
85	Ms. Sneha Wahurwagh	B.Sc.II	
86	Ms. Nikita Modak	B.Sc.II	
87	Ms. Aishwarya R. Sable	B.Sc.I	
88	Ms. Nikita J. Upadhye	B.Sc.II	
89	Ms. Vaissnavi Khumkar	B.Sc.II	
90	Ms. Rupali S. Solanke	B.Sc.I	
91	Ms. Pallavi M. Sonone	B.Sc.II	
92	Mr. Gaurav R. Akot	B.Sc.II	
93	Mr. Harshal Bais	B.Sc.II	
94	Ms. Shubhangi G. Dhole	B.Sc.III	Secured 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> position respectively in Zoology Aptitude Test organized by Dept. of Zoology
95	Ms. Tejaswini Wankhade		
96	Ms. Shital K. Dahibhate		
97	Ms. Arti G. Bhatkar	M.Sc.I	Won 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in the Article Writing Section of College level creative writing Competition organize by department of language and the Library.
98	Ms. Nisha R. Chatarkar	B.Sc.III	
99	Ms. Payal R. Sonawane	B.Sc.II	
100	Mr. Yogesh H. Irache	B.Sc.III	Won 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in the Essay Writing Section of College level creative writing Competition organize by department of language and the Library.
101	Ms. Prajakta V. Deshmukh	B.Sc.II	
102	Ms. Asmita N. Gadge	B.Sc.II	
103	Ms. Shivani V. Borkar	B.Sc.II	Won 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in the Story Writing Section of College level creative writing Competition organize by department of language and the Library.
104	Mr. Ghanshyam D. Varma	B.Sc.II	
105	Ms. Vaishnavi R. Sonawane	B.Sc.II	
106	Ms. Neha B. Deshmukh	B.Sc.III	Won 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> prize respectively in the Poetry Writing Section of College level creative writing Competition organize by department of language and the Library.
107	Ms. Anamika D. Deshpande	B.Sc.III	
108	Ms. Pratiksha V. Banole	B.Sc.III	

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### ACHIEVEMENTS OF STAFF MEMBERS

S.No.	Name	Designation	Achievements
01	Dr. V. D. Nanoty	Principal	<ol style="list-style-type: none"> <li>1. SGBAU Interview panel - Appointed as Subject expertise V. C. Nominee</li> <li>2. Appointed as Chair person in PG Affiliation LEC committee at S.K. College, Akola</li> <li>3. Chief guest and Jury member in various colleges and at Nishu Nursery and Kothari Convent, Akola (7/12/2017)</li> </ol>
02	Dr. U. K. Bhalekar	Asso. Professor & H.O.D (Microbiology)	<ol style="list-style-type: none"> <li>1. Recognized as a Supervisor For Ph.D. in Faculty of Science and Technology (18/12/2017)</li> <li>2. Appointed as Member of Board of Studies of Biochemistry (including Microbiology and Food Science) on 1/11/2017</li> <li>3. Chief guest and Jury Member at S.K. College in poster competition.</li> <li>4. Chief guest for Cultural program at Dr. PDKV, Akola at on 3/10/2017 and 6/10/2017</li> <li>5. Member of Decentralization of Uni. Examination of various courses.</li> <li>6. As Judge in medicine /Pharmacy category of Akola District Level Avishkar 2017 Competition by SGBAU Amravati.</li> <li>7. Work as Exam Co-coordinator YASHADA, Pune.</li> <li>8. Chief Guest in Students Unit of Microbiology Society of India at Shankarlal Khandelwal College, Akola (4/12/2017)</li> <li>9. Delivered invited lecture in NSS Camp at Sonala, on AIDS Awareness on 7/1/2018.</li> <li>10. Actively involved as Resource Person in State Level Microbiological Contest and Microbiolympiad organized by R.C. Patel Arts, Commerce and Science College, Shirpur (9/1/2018)</li> </ol>

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03	Dr. Rajesh D. Chandrawanshi	Director (Sports and Physical Education)	<ol style="list-style-type: none"> <li>1. Ph.D. degree awarded (23/06/2017)</li> <li>2. Member of Wrestling Men &amp; Women, Selection Committee, S.G.B. Amravati University, Amravati.</li> <li>3. Team Manager of Wrestling Free Style Women participated in All India Inter University Tournament held at Maharshi Dayanand University, Rohtak (03-05/11/2017).</li> <li>4. Bronze Medals in Hammer Throw in 39<sup>th</sup> Maharashtra State Masters Athletics Meet 2017 held at Washim</li> </ol>
04	Dr. Pradip P. Deohate	Assist. Professor (Chemistry)	Received "Award for Excellence in Research" in "3 <sup>rd</sup> South Asian Education Awards - 2018" at Hyderabad (18/03/2018).
05	Mrs. V.N. Badgujar	Assist. Professor, & H.O.D.(Botany)	Published a Text Book of Practical Botany for B.Sc.II (ISBN 978-81-905776-105-7)
06	Dr. Poonam T. Agrawal	Assist. Professor & H.O.D (Chemistry)	<ol style="list-style-type: none"> <li>1. Chaired the technical session of one International Conference of Advances in Science, Technology and Management, held at COET Babhulgaon.</li> <li>2. Chairperson of Technical Session of National Conference held at Sakharkherda.</li> <li>3. Delivered a Guest lecture on Reaction Mechanism at Sinnha College, Patur.</li> <li>4. Worked as a Jury member for District level Science Exhibition held at Moharidevi Khandelwal School, Akola.</li> </ol>
07	Dr. Sudhir R. Kohchale	Assist. Professor and Programme Officer, NSS	<ol style="list-style-type: none"> <li>1. Appointed as Area coordinator NSS, Nominated by Hon. V.C.</li> <li>2. Declared as trainer of Disaster Management by Collector office, Akola.</li> <li>3. Delivered lecture on Disaster Management at Jagdamb Mahavidyalaya, Achalpur, Adarsh Mahavidyalaya, Dhamangaon (Rly).</li> <li>4. Arranged many Awareness campaign on Disaster management in Akola District.</li> </ol>

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08	Dr. Anjali A. Sangole	Assist. Professor (Botany)	<p>1. Published a Text Book of Practical Botany for B.Sc.II (ISBN 978-81-905776-105-7)</p> <p>2. Published a Text Book of Botany for B.Sc.II Sem. IV (ISBN 13: 978-93-87278-04-2)</p>
09	Dr. H. S. Malpani	Assist. Professor (Microbiology)	<p>1. Selected for participation in India International Science festival in the category of Young Scientist Organized by Govt. Of India.</p> <p>2. Worked as a judge for district level Science Exhibition organized by Govt. of Maharashtra at Khandelwal School, Akola (10/12/2017).</p> <p>3. Judge for Science Exhibition on the theme "FOOD FOR ALL" at Kothari Convent, Akola (7/12/2017).</p> <p>4. Delivered invited lecture on Goodness of Microorganism in one day workshop EUREKA jointly organized by State Institute of Sci. Education, Nagpur &amp; R L T College of science, Akola (25/11/2017)</p> <p>5. Delivered invited lecture in NSS Camp at Sonala, on 'Social media and Society' (09/01/2018).</p> <p>6. Resource Person in State Level Microbiological Contest and Microbiolympiad at R.C. Patel Arts, Commerce and Science College, Shirpur (09/01/2018)</p>
10	Dr. R. M. Agrawal	Asst. Professor (Physics)	<p>Won 2<sup>nd</sup> prize of 'Poster presentation' in International conference ICANN-2017 at T.C. College of science &amp; commerce, Baramati, Dist.-Pune (07/12/2017)</p>
11	Mr. S. R. Jaiswal	Asst. Professor (Physics)	<p>Invited as a Guest Lecture and Demonstrator in MSP arts Science and KPT Commerce college, Manora Dist. Washim.</p>
12	Dr. S. L. Munde	Asst. Professor & Co-Programme Officer NSS (Mathematics)	<p>1. Worked as a Subject Expert at University Level Seminar Competition for U.G. students on subject "CALCULUS" at Mahatma Fule College, Warud, Dist. Amravati (24/09/2017).</p>

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			<p>2. Worked as a Chair Person of session in “ State Level Workshop on Preparation, Strategies and Guidelines-2018” for P.G. Entrance Examinations in Mathematics at Brijlal Biyani Science College, Amravati (20-22/01/2018).</p> <p>3. Worked as a Subject Expert at University Level Seminar Competition for U.G. students on subject “DIFFERENTIAL EQUATION” at Vidya Bharati Mahavidyalaya, Amravati (10/02/2018).</p> <p>4. Worked as a Subject Expert at University Level Seminar Competition on “ANALYSIS” for P.G. students at Shri Shivaji Atrs, Commerce and Science College, Akola, Dist. Akola (10/03/2018).</p>
13	Ms. S.N. Gawande	Assist. Professor (Microbiology)	Actively involved as Resource Person in State Level Microbiological Contest and Microbiolympiad at R.C. Patel College, Shirpur (09/01/2018)
14	Mr. Arun B. Khedkar	Assist. Professor (English)	Worked as an examiner at a district level elocution competition ‘Swachata Karandak Spardha’ organized by Z.P. Akola, held at Dr. P.K.V. Akola (31/01/2018)

\* All teaching staff members of Degree College presented research papers in various national & international conferences/symposia/workshops etc. Most of them published research papers in journals of national and international repute.

**Dr. Archana S. Sawarkar**  
Co-ordinator  
Achievement Committee

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## RESEARCH ACTIVITY

### REPORT

#### 1. MAJOR RESEARCH PROJECT (UGC)

Sr. No.	Department	Name of P.I.	Title of Project	Duration	Amount Sanctioned
1	Chemistry	Dr. A.G. Sarap (Co-Investigator)	Special Distribution of Uranium and associated water quality Parameters in Groundwater/Drinking Water in 3 Districts of Amravati Division, Maharashtra State.	2014-2017	24,49,000

#### 2. PAPER PUBLICATION

Sr. No.	Department	Name of Author	Title of Research Paper	Name of Journal Volume	Impact Factor
1	Chemistry	Dr. P.T. Agrawal (3)	1. Synthesis of some novel organic N-lactosylated thiocarbamides Nanoparticles.	International Journal of Researches in Bioscience, Agriculture & Technology Special Issue(2), Vol-V, July 2017. Pg.No.55-57, ISSN No. 2347-517X	4.50
			2. A facile synthesis of some new N-lactosylated thiocarbamates nanoparticles and comparative account of their antimicrobial activity.	International J. Pure and Applied Res. in Engg. & Tech.,vol 6(2), 2017 Pg. no. 315-318 ISSN-2319-507	4.226
			3. Synthesis and Characterization of Hepta-O-Benzoyl- $\alpha$ -D-Maltosyl Isothiocyanate Nanoparticles.	Aayushi International Interdisciplinary Research Journal Special Issue No.26	4.57
2	Chemistry	Dr. P.P. Deohate (6)	1. Isolation, identification and synthesis of analogues of kaempferol isolated from phyllanthus niruri.	International J. Pure and Applied Res. in Engg. and Tech.,6(2),163,2017	4.226
			2. Synthesis of triazolo-dithiadiazines by sulphur-sulphur bond formation through microwave assisted cyclocondensation and biological evaluation.	International J. Pure and Applied Res. in Engg. and Tech.,6(2),233,2017	4.226

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			3. Conventional and MW induced synthesis of some bridgehead nitrogen containing triazolodithiadiazines by sulphur-sulphur bond formation through cyclocondensation and antimicrobial study.	J.Indian Chemical Society, 94,1221,2017	0.145
			4. Non-aqueous potentiometric determination of pharmaceutically potent drug diphenhydramine hydrochloride.	J.Indian Chemical Society, 94,1239,2017	0.145
			5. The Conventional and MW assisted synthesis of some bridgehead nitrogen containing triazolo-thiadiazoles by cyclocondensation using N-aryl isocyanodichlorides and antimicrobial evaluation.	Indian J. Heterocyclic Chemistry,27(04),377, 2017	0.207
			6. Simultaneous non-aqueous potentiometric determination of pharmaceutically potent ibuprofen-diphenhydramine hydrochloride & paracetamol diphenhydramine hydrochloride combination drugs.	Aayushi International Interdisciplinary Research Journal, 26(Sp.),1114,2018	4.57
3	Chemistry	Dr. P.R. Kawle (3)	1. One step iodine promoted synthesis of imidazole-2-one and pyrimidine-1-one.	Journal of Chemistry and Chemical Sciences 7(11),2017-898	
			2. Simple Approach For preparation of Bis(2-aryl) H-Benzimidazole Nickel (II) chloride complex	International J. Pure and Applied Res. in Engg. and Tech., 6(2), 2017 Pp 362-367	4.226
			3. Acridine substituted (1,2,4) dithiazoiiodine: A potent larvicidal & seed germination promoting agent.	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.57
4	Chemistry	Dr. K.M. Heda (2)	1. Synthesis and screening of sugar Hydrazino Benzothiozoyl Thiocarbamide for Biological studies.	International J. Pure and Applied Res. in Engg. and Tech., 6(2), 355-361,2017	4.226



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			2. Synthesis, Characterization and Biological studies of newly synthesized 3-acyl [Nitroaniline]-4-S-benzyl-6-P-tolylimino-2-phenylimino-2, 3-dihydro-1,3,5-thiadiazines (hydrochlorides)	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.57
5	Chemistry	Dr. A.G. Sarap (1)	1. Novel study of synthesis of Nanoparticle of some lactosylated dithibiurets and their XRD study.	International J. Pure and Applied Res. in Engg. & Tech., vol 6(2), 2017 Pg.no. 238-245. ISSN-2319-507	4.226
6	Chemistry	Mr. S.C. Zyate (1)	1. Facile Synthesis of Chalcone Derivatives and their Characterization	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.57
7	Microbiology	Ms. S.N. Gawande (1)	1. Analysis of Bacteriological Parameter of public water supply in Daryapur and Anjangoan Tehsil and Calculate percentage of contaminated water in 2017-18.	International Journal of creative research thoughts Vol. 6 Issue 1	
8	Zoology	Dr. S.M. Nagrale (4)	1. Reproductive morphology in mycophagus thrips <i>Elaphrothrips procer</i> (Thysanoptera: Phlaeothripidae)	<i>International Journal of Researches in Bio-sciences, Agriculture &amp; Technology</i> IJRBAT, Special issue (2), Vol.-V, (July 2017) (ISSN:2347-517X-Online)	5.060
			2. A preliminary survey for hard ticks (Acari: Ixodidae) diversity on the livestock in Akola District, Maharashtra (India)		
			3. Potential Mosquitocide phyto- extract of <i>Parthenium hysterophorous</i> (Congress grass) weed plant	<i>International Journal of Pure and Applied Research in Engineering and Technology.</i> IJPRET-2017 (September 2017), Vol.6 (2), (ISSN:2319-507X)	4.226
			4. Insilico analysis and homology modeling of TBC1D3 protein		

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			5. Developmental Variation of <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaeothripidae)	International Journal of Current Engineering and Scientific Research (IJCESR). Vol.-5, (1). 2018	3.24
			6. Morphological Variation of Thrips insect <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaeothripidae)	Aayushi International Interdisciplinary Research Journal 2018 Special Issue No. 26	4.57
9	Zoology	Dr. A.S. Sawarkar (3)	1. Medicinal prospects for major ampullate silk of giant wood spider, <i>Nephila Pilipes</i>	<i>International Journal of Researches in Biosciences, Agriculture and Technology</i> " (July 2017), Special issue (2), Vol.-V, 163-165 (ISSN:2347-517X-Online)	5.060
			2. Zinc induced histopathological and biochemical anomalies in the liver of fish <i>Ophiocephalus punctatus</i>	<i>International Journal of Life Sciences</i> (Sept. 2017), Special Issue, A8, 147-150, (ISSN:2320-7817, eISSN:2320-964X)	4.369
			3. X- ray diffraction study of dragline silk of <i>Nephila pilipes</i> (Araneae: Araneidae)	International Journal of Pure and Applied Research in Engineering and Technology (September 2017), Vol.6 (2), 66-69, (ISSN:2319-507X)	4.226
10	Zoology	Dr. S.R. Kohchale (2)	1. Serum Biochemical alterations in Sickel cell anemic subjects from Gadchiroli District, Maharashtra	<i>International Journal of Researches in Biosciences, Agriculture and Technology</i> " IJRBAT, Special issue (2), Vol.-V, (July 2017) (ISSN:2347-517X-Online)	5.060
			2. Effect of folic acid antagonist methotrexate on prostate gland of Indian Palm Squirrel <i>Funambulus Pennanti</i> (Wroughton)	ESSENCE-Int. Journal for Environmental Rehabilitation and Conservation, Vol-VIII(2) 2017(61-64)	-

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11	Zoology	Dr. R.P. Joshi Sawalkar (5)	1. Hemolymph Glucose Dynamism in Silkworm <i>Bombyx mori</i> Infected with Grasserie and Flacherie	Environment and ecology. Kalyani.Vol35 (2C) : 1354—1356, April—June 2017 ISSN: 0970-0420	--
			2. Seasonal incidence of Pathogenic Diseases Flacherie in Silkworm <i>B.morin</i> Vidarbha Region(Maharashtra)	Trends in biosciences 10(13), UGC enlisted	NAAS rating 3.94
			3. Seasonal incidence of Pathogenic Disease Grasserie in Silkworm <i>B.morin</i> Vidarbha Region (Maharashtra)	Indian Journal of pure and applied biology. UGC enlisted. ISSN: 0970-2091	Impact factor (2012) 3.0
			4. Haemolymph response in silkworm <i>Bombyx mori</i> , during infection with Grasserie.	International Journal of Researches in Biosciences, Agri. & Tech. Special Issue No.(2) Vol. V, July 2017	-
			5. Quantitative biochemical responses in midgut tissue of silkworm <i>Bombyx mori</i> , during Grasserie infection.	105 <sup>th</sup> Indian Science Congress, Manipur Imphal on 16 to 20 <sup>th</sup> March 2018 (Abstract)	-
12	Physics	Mr. P. P. Gedam (5)	1. Synthesis and characterization of polyaniline nanowires by a novel electrochemical polymerization technique.	International journal of current engineering and scientific Research (IJCESR)	3.2
			2. Synthesis & Characterization of L-Valine Capped Sn Doped CuO Nanoparticles.	International journal of current engineering and scientific Research (IJCESR)	3.2
			3. Optical limiting in gelatin stabilized Cu-PVP nanocomposite colloidal suspension	American Institute of Physics (Conference Proceedings)	-
			4. Synthesis and characterization of Ni doped ZnO nanoparticles.	American Institute of Physics (Conference Proceedings)	-
			5. Polyaniline thin film synthesis and characterization by a novel electrochemical polymerization technique.	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.57

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13	Physics	Mr. R.M. Agrawal (1)	1. Study of DC Conductivity of Polypyrrole doped with SnO <sub>2</sub> Nanocomposites	Int. Journal of Scientific Research in Science, Engnn and Techn (ijsrset) Vol.4 , Issue 1, pp 1249-1253. (2018). ISSN : 2394-4099.	4.916
14	Physics	Mr. S. R. Jaiswal (1)	1. Comparative study of nanosized Al <sub>2</sub> O <sub>3</sub> powder synthesized by Solgel (citric and stearic acid) and aldo-keto gel method	Optik International Journal for light and electron optics Vol. 158, pp. 1248-1254, 2017	0.8
15	Botany	Mrs V. N. Badgujar (1)	1. Use of Natural Food Additives from Hydrocerus Undates (dragonfruit) in Food industry-A Green step in Green Chemistry	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.574
16	Botany	Mr. P.M. Khadse (2)	1. Pharmacognostic studies on Acacia arabica (Lamk.) Willd Analytical studies	International Journal of Scientific Research in Science & Technology	3.6
			2. Qualitative Phytochemical ana- lysis and pharmacologi- cal studies of Acacia Arabica (Lamk.) willd	Ayushi International Interdisciplinary Research Journal Special Issue No. 26	4.574
17	Botany	Dr. A. A. Sangole (3)	1. Role of physic-chemical analysis in soil quality and management	International journal of pure and applied research in Engineering and Technology	4.226
			2. Phytochemical screening of selected medicinal plants of the family Lamiaceae	International journal of Life Sciences	4.23
			3. Monitoring Airborne fungal Mycoflora in College Laboratory	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.574
18	Botany	Mr. S. Madavi (2)	1. Weeds of Agriculture Fields in Kharip and Rabi Season and their control measures In Gadchiroli Dist. of Maharashtra State, India	Aayushi International Interdisciplinary Research Journal (AIIRJ) Special Issue No. 26	4.57

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			2. Investigation of Rhizosphere Mycoflora from some members of Solanaceae Family	International Journal of Current Engineering and Scientific Research (Ijcesr). Vol.-5, 1	3.24
19	Mathematics	Ms. S.B. Tadam	Characterization of uniformly continuous Pseudo Metric space	Aayushi International Interdisciplinary Research Journal Special Issue No. 26	4.574
20	Electronic	Mr. R.D. Chaudhari (1)	1. Personal Iris recognition using Neural network	International Journal of Pure and Applied Research in Engg and Technology	4.226
21	D.P.E	Dr. R.D. Chandrawanshi (2)	1. A study of Aerobic Endurance among Judo players and Wrestlers of Akola City.	Online International Interdisciplinary Research Journal, ISSN 2249-9598, Vol.-07, July 2017 Special Issue (UGC Approved)	3.816
			2. A comparative study of upper body strength among Judo Players and Wrestlers of Akola City.	International Online Physical Education & Sports Research Journal (Academic Sports Scholar) ISSN No. 22773665 Vol. No.06, Issue No.07, July 2017 (UGC Approved)	3.102
22	Library	Mr. M.R. Ubale	1. Use of information and communication technology (ICT) in the Library	Aayushi International Interdisciplinary Research Journal(AIIRJ), Vol-V, Issue-I, Jan 2018.	4.574

#### 4. PAPER PRESENTED IN CONFERENCE / SEMINAR :

Sr. No.	Department	Name of Author	Title of Research Paper	Name & Place of Conference/Seminar/ Workshops	Year/ Date
1	Microbiology	Dr. V.D. Nanoty (5)	1. Enumeration of Bacterial Pathogens from Nosocomial infection prone areas of Hospitals of Akola City	Recent Trends in Biotechnology & Biodiversity; Shri Shivaji College of Science, Amravati,	22-23 Sept. 2017

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			2. Nanoparticle conjugated Antibiotics: New hope against Antibiotic resistance	Recent Advances in Chemical Science; Shri Shivaji College of Science, Akola	26-27 Feb 2018
			3. MTT based method for rapid detection of oxacillin resistance in Staphylococcus aureus	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Amravati	22-23 Sept. 2017
			4. Study of oral microflora and application of oral depositors to avoid oral infection in RPD patient.	International Conference on Frontiers in Life Science & Earth Science; Prof. Ramkrishna More College of Arts, Science and Commerce, Pune	18 <sup>th</sup> -19 <sup>th</sup> Jan 2018
			5. To study antimicrobial activity of Citrus Sinesis (orange) peel extract against oral pathogen	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Akola	26-27 Feb. 2018
2	Microbiology	Dr. U.K. Bhalekar (3)	1. Enumeration of Bacterial Pathogens from Nosocomial infection prone areas of Hospitals of Akola City	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Amravati	22-23 Sept. 2017
			2. MTT based method for rapid detection of oxacillin resistance in Staphylococcus aureus	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Amravati	22-23 Sept. 2017
			3. Study of oral microflora and application of oral depositors to avoid oral infection in RPD patient.	International Conference on Frontiers in Life Science & Earth Science; Prof. Ramkrishna More College of Arts, Science and Commerce	18-19 Jan. 2018
3	Microbiology	Dr. H.S. Malpani (2)	1. Enumeration of Bacterial Pathogens from Nosocomial infection prone areas of Hospitals of Akola City	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Amravati	22-23 Sept. 2017

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			2. Nanoparticle conjugated Antibiotics: New hope against Antibiotic resistance	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Akola	26-27 Feb. 2018
4	Microbiology	Ms. S.N. Gawande (3)	1. MTT based method for rapid detection of oxacillin resistance in Staphylo coccus aureus	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Amravati	22-23 Sept. 2017
			2. Study of oral microflora and application of oral depositors to avoid oral infection in RPD patient.	International Conference on Frontiers in Life Science & Earth Science; Prof. Ramkrishna More College of Arts, Science and Commerce, Pune	18-19 Jan. 2018
			3. To study antimicrobial activity of Citrus Sinesis (orange) peel extract against oral pathogen	Recent Trends in Biotechnology & Biodiveristy; Shri Shivaji College of Science, Akola	26-27 Feb. 2018
5	Chemistry	Dr. P.T. Agrawal (4)	1. Synthesis of some novel organic N-lactosylated thiocarbamides Nanoparticles.	International conference Recent trends in science and technology. Sustainable development through Scientific approach. Shivaji College, Nagpur.	July 12-14, 2017
			2. A facile synthesis of some new N-lactosylated thiocarbamates nanoparticles and comparative account of their anti-microbial activity.	Int. Conf. "Advances in science, technology and management" Organized by Shivaji Engg. College, Babhulgaon, Akola	10 Oct. 2017
			3. Comparative study of MW assisted synthesis with conventional synthesis of some novel glycosyl thiobiurets.	UGC sponsored national conference on Recent Advances in Chemical Sciences Organized by Shivaji College, Akola	Feb. 26 & 27, 2018

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			4. Synthesis and Characterization of Hepta-O-Benzoyl- $\alpha$ -D-Maltosyl Isothiocyanate Nanoparticles.	UGC and DST sponsored Int. Conf. on Recent trends in science and technology S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad)	22-23 March, 2018
6	Chemistry	Dr. P.P. Deohate (4)	1. Synthesis of triazolo-dithiadiazines by sulphur-sulphur bond formation through microwave assisted cyclocondensation and biological evaluation.	International Conference on Advances in Sciences, Technology and Management, College of Engg. and Tech., Akola	10 Oct. 2017
			2. Synthesis of triazine linked pyrazoles by conventional and MW irradiation technique, spectroscopic investigation and antimicrobial evaluation.	National Conference on Recent Advances in Chemical Sciences, Shri Shivaji College of Arts, Commerce and Science, Akola	26,27 Feb. 2018
			3. Studies of antioxidant properties of analogues of polar flavanoid quercetin isolated from phyllanthus emblica.	National Conference on Recent Advances in Chemical Sciences, Shri Shivaji College of Arts, Commerce and Science, Akola	26,27 Feb. 2018
			4. Simultaneous non-aqueous potentiometric determination of pharmaceutically potent ibuprofen-diphenhydramine hydrochloride and paracetamol diphenhydramine hydrochloride combination drugs.	International Conference on Recent Trends in Science and Technology, S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad)	22,23 Mar, 2018
7	Chemistry	Dr. P.R. Kawle (3)	1. Simple approach for preparation of Bis (2-aryl) H-Benzimidazole Nickel (II) chloride complex	International Conference on Advances in Sciences, technology and management (IC-ASTM)2017, Akola	10 Oct. 2017
			2. Synthesis of imidazoles and pyrazines using efficient lemon juice catalyst.	National Conf. on Recent Advances in Chemical Sciences) (NCRACS-2018) Akola	26,27 Feb. 2018



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			3. Acridine substituted (1,2,4) dithiazoiiodine: A potent larvicidal and seed germination promoting agent.	Int. Conf. on Recent trends in science and technology, Karanja (Lad)	22,23 Mar. 2018
8	Chemistry	Dr. K.M. Heda (3)	1. Biological studies of 1-phenyl-3,2-hydrazino-1, 3-substituted benzothiozoyl thiocarbamide.	National Conference on Recent trends in Biotechnology and Biodiversity NCBB-2017	22,23 Sept. 2017
			2. Synthesis and screening of sugar Hydrazino Benzo thiozoyl Thiocarbamide for Biological studies.	International Conference on Advances in Sciences, technology and management (IC-ASTM) Akola	10 Oct. 2017
			3. Synthesis, Characterization and Biological studies of newly synthesized 3-acyl [Nitroaniline]-4-S-benzyl-6-P-tolylimino-2-phenylimin-2,3-dihydro-1,3,5-thiadi-azines (hydrochlorides)	National Conf. on Recent Advances in Chemical Sciences (NCRACS-2018) Akola	26,27 Feb. 2018
9	Chemistry	Dr. A.G. Sarap (2)	1. Novel study of synthesis of Nanoparticle of some lactosylated dithibiurets and their XRD study.	International Conference on Advances in Sciences, Techology & Management, College of Engg. and Tech., Akola	10 Oct. 2017
			2. Comparative study of MW assisted synthesis with conventional synthesis of some novel glycosyl thiobiurets	UGC sponsored national conference on Recent Advances in Chemical Sciences. Organized by Shivaji College, Akola	Feb. 26 & 27, 2018
10	Chemistry	Mr. V.D. Deotale (1)	1. Synthesis of 1,3 Diaryl-2-thioxo-dihydro pyrimidine-4, 6-(1H,5H)-diones using graphene based coperoxide nano composite.	UGC sponsored national conference on Recent Advances in Chemical Sciences. Shivaji College, Akola	Feb. 26 & 27, 2018
11	Chemistry	Mr. S.C. Zyate (1)	Facile synthesis of Chalcone derivatives and their characterization.	Int. Conf on Recent trends in science and technology, Karanja(Lad)	22-23 March 2018

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12	Physics	Mr. P. P. Gedam (2)	1. Synthesis and characterization of polyaniline nano-wires by a novel electrochemical polymerization technique.	Recent Trends in Synthesis and Characterization of Futuristic Materials in Science for the development of Society. Shingne Arts, Gawande Sci & Comm. College, Sakharkheda, Buldhana	13 Jan. 2018
			2. Polyaniline thin film synthesis and characterization by a novel electrochemical polymerization technique.	Int. Conf on Recent trends in science and technology, Karanja(Lad)	22-23 March 2018
13	Physics	Mr. R. M. Agrawal (1)	1. Humidity Sensing Characteristics of Porous ZnO/SnO <sub>2</sub> Doped Thick Films	International Conference on "Applied Nanotechnology and Nanoscience". (ICANN-2017) Poster Presentation : 2 Prize	7-9 Dec. 2017
14	Physics	Mr.S. R. Jaiswal (2)	1. Bluish white light emitting phosphor Bi <sup>3+</sup> , Dy <sup>3+</sup> , Co-doped Y (P,V,Nd) O <sub>4</sub> potentially for lamp phosphor (Abstract)	National Conference at Shri Shivaji Arts, Commerce and Science College, Akola.	26,27 Feb. 2018
			2. Investigation on visible Quantum cutting in SrF <sub>2</sub> co-doped with Gd <sup>3+</sup> , Eu <sup>3+</sup> Phosphor (Abstract)	National Conference on Luminescence's and its application Trivendram (Kerala)	.. 2018
15	Zoology	Dr. S.M. Nagrale (6)	1. Reproductive morphology in mycophagus thrips <i>Elaphrothrips procer</i> (Thysanoptera: Phlaeothripidae)	International Conference on "Recent Trends in Science and Technology: Sustainable Development Through Scientific Approach" at Shri Shivaji Education Society's Science College, Nagpur	12-14 July 2017
			2. A preliminary survey for hard ticks (Acari: Ixodidae) diversity on the livestock in Akola District, Maharashtra (India)		
			3. Potential Mosquitocide phytoextract of <i>Parthenium hysterophorous</i> (Congress grass) weed plant	International Conference on "Advances in Science, Technology and Management" at College of	22-23 Sept. 2017

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			4. Insilico analysis and homology modeling of TBC1D3 protein	Engineering and Technology, Akola.	
			5. Developmental Variation of <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaeothripidae)	National Conference on recent trends in synthesis and characterization of futuristic material in Sciences for the development of society, Late B.S. Arts, Prof.N.G. Science & A.G. Commerce College, Sakharkherda, Dist. Buldhana.	13 Jan 2018
			6. Morphological Variation of Thrips insect <i>Elaphrothrips procer</i> (Schmutz) (Thysanoptera: Phlaeothripidae)	International Conference on Recent Trends in Science and Technology, S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad)	22-23 March 2018
16	Zoology	Dr. A. S. Sawarkar (4)	1. Medicinal prospects for major ampullate silk of giant wood spider, <i>Nephila Pilipes</i>	International Conference on "Recent Trends in Science and Technology: Sustainable Development Through Scientific Approach" at Shri Shivaji Education Society's Science College, Nagpur	12-14 July 2017
			2. Zinc induced histopathological and biochemical anomalies in the liver of fish <i>Ophicephalus punctatus</i>	National Conference "Recent Trends in Biotechnology and Biodiversity" at Shri Shivaji Science College, Amravati.	22-23 Sept. 2017
			3. X- ray diffraction study of dragline silk of <i>Nephila pilipes</i> (Araneae: Araneidae)	International Conference on "Advances in Science, Technology and Management" at College of Engineering and Technology, Akola.	10 Oct. 2017
			4. Biochemical analysis of egg sac silk of <i>Nephila Nephila pilipes</i> with FTIR	National Symposium cum Workshop on "Science & Technology	3-5 Dec. 2017

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			spectroscopy	for Sustainable Wildlife Management, Biodiversity & Ecosystems in India” at J. D. Patil Sangludkar Mahavidyalaya, Daryapur.	
17	Zoology	Dr. S.R. Kohchale (1)	1. Serum Biochemical alterations in Sickel cell anemic subjects from Gadchiroli District, Maharashtra	International Conference on “Recent Trends in Science and Technology: Sustainable Development Through Scientific Approach” at Shri Shivaji Education Society’s Science College, Nagpur	12,13, 14th July 2017.
18	Zoology	Dr. R.P. Joshi (Sawalkar) (3)	1. Haemolymph response in silkworm Bombyx mori, during infection with Grasserie.	Recent Trends in Science and Technology at Nagpur	12, 13, 14 <sup>th</sup> July 2017.
			2. Alterations in content of Alkaline Phosphatase and Acid Phosphatase in haemolymph and midgut tissue of the silkworm during Grasserie disease	“Recent Trends in Biotechnology and Biodiversity (NCBB-2017)” at Amravati	22-23 <sup>rd</sup> Sept. 2017
			3. Seasonal incidences of pathogenic disease Flacherie in silkworm Bombyx mori in Vidarbha region (Maharashtra)	National Seminar on Natural Heritage & Biodiversity, at Hislop College, Nagpur	Held on 17&18 <sup>th</sup> January 2018
19	Botany	Mrs. V.N. Badgujar (3)	1. Use of Natural Food Additives from Hydrocerus undates (dragon fruit) A Green step in Green Chemistry	National Conferences on Recent Advances in Chemical Sciences, Department of Chemistry and IQAC Shri Shivaji Science College Akola	26-27 Feb. 2018
			2. Study of Ethno medicinal plants used by tribals for hepatic diseases in west Vidarbha.	State level Seminar “Current Scenario of Botanical Research Organized Shri Shivaji Science College of Arts, Commerce and Science, Akola	2 Feb. 2018
			3. Use of Natural Food Additives from Hydrocerus Undates(dragon fruit)	National conference on Recent trends in Biotechnology and Biodiversity	22-23 Sept. 2017

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20	Botany	Mr. P.M. Khadse (4)	1. HPTLC finger print analysis and antioxidant activity of flavonopids fraction of Solanum melongena Linn. Fruit	State level seminar on Current Scenario of Botanical Research (SSCSBR-2018), Shri Shivaji College, Akola.	2 Feb. 2018
			2. Pharmacognostic studies on Acacia Arabica (Lamk.) willd analytical studies	National conference on recent trends in synthesis and characterization of futuristic material in sciences for the development of society- (NCRTFMDS-2018)	13 Jan. 2018
			3.HPTLC finger print analysis and antioxidant activity of alkaloid fraction of Ziziphus mauritiana (Lam.) Fruit	National conference on Recent advances in chemical sciences held at Shri Shivaji College, Akola	26-27/2/ 2018
			4. Qualitative phytochemical analysis and pharmacological studies of Acacia Arabica (Lamk.) willd	International conference on Recent trends in science and technology, held at SSSKR. Innani Mahavidyalaya, Karanja (Lad), Dist. Washim	22-23 March 2018
21	Botany	Dr. A.A. Sangole (3)	1. Pollen histochemical analysis of GossypiumSp.	National Conferences on Recent Advances in Chemical Sciences, Department of Chemistry and IQAC Shri Shivaji Science College Akola	26-27 Feb. 2018
			2. Amino Acids Composition of Delonixregia pollen Grains	Department of Botany Sant Gadage Baba Amravati University Amravati XX National Conferences of Aerobiology-2018	29-31 Jan. 2018
			3. Pollen viability of selected varieties of GossypiumSpp	State level Seminar "Current Scenario of Botanical Research Organized Shri Shivaji Science College of Arts, Commerce and Science, Akola	2 Feb. 2018

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22	Botany	Mr. S.V. Madavi (4)	1. Weeds of Agriculture Fields in Kharip and Rabi Season and their control measures in Gadchiroli District of Maharashtra State, India	International Conference on Recent trends in Science and Technology, organized by S.S.S.K.R. Innani Mahavidyalaya Karanja (Lad), Dist. Washim.	22&23/03/2018
			2. Evaluation of Carbohydrates, Proteins and Vitamin C in ZiziphusMauritianaFruits	National Conference on recent advances in chemical sciences organized at Shri Shivaji College of Arts, Commerce and Science, Akola.	26-27 Feb. 2018
			3. Preliminary Survey of Common Weeds of Kharip and Rabi crop fields from Gadchiroli District of Maharashtra State and their possible control	State Level Seminar on "Current Scenario of Botanical Research" organized at Shri Shivaji College of Arts, Commerce and Science, Akola.	02 Feb. 2018
			4. Investigation of Rhizosphere Mycoflora From Some Members of Solanaceae Family	National Conference on recent trends in synthesis and characterization of futuristic material in Sciences for the development of society, Late B.S. Arts, Prof.N.G. Science & A.G. Commerce College, Sakharkherda, Dist. Buldhana.	13 Jan. 2018
23	Mathematics	Ms. S.B. Tadam (1)	Characterization of uniformly continuous Pseudo Metric space	Int. Conf. Recent Trends in Science and Technology, (ICRTST-2018) SSSKR Innani Mahavidyalaya, Karanja (Lad)	22-23 March 2018
24	Electronic	Mr. R.D. Chaudhari (1)	1. Personal Iris recognition using Neural network	International Conference on Advances in Sciences, Technology and Management, College of Engg. and Tech., Akola	10 Oct. 2017

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

25	<b>Computer</b>	<b>Prof. R.B. Ghayalkar (1)</b>	"Use of Cloud computing in Education Field A Review"	Recent Trends in Science and Technology, SSSKR Innani Mahavidyalaya, Karanja	22-23 March 2018
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### 5. PARTICIPATION IN CONFERENCE / SEMINAR / WORKSHOP

Sr. No.	Department	Name of Participant	Theme & Place of Conference/seminar/workshops	Level : National/ State / District	Year/ Date
1	<b>Chemistry</b>	<b>Dr. P.T. Agrawal</b>	1. Workshop on 'NAAC-Accreditation and Assessment Process' Organized by B.G.E. Society, Akola	University Level	23 July 2017
2	<b>Chemistry</b>	<b>Dr. P.P. Deohate</b>	1. Workshop on 'NAAC-Accreditation and Assessment Process' Organized by B.G.E. Society, Akola	University Level	23 July 2017
3	<b>Chemistry</b>	<b>Dr. P.R. Kawle</b>	1. Workshop on 'NAAC-Accreditation and Assessment Process' Organized by B.G.E. Society, Akola	University Level	23 July 2017
4	<b>Chemistry</b>	<b>Dr. K.M. Heda</b>	1. Workshop on 'NAAC-Accreditation and Assessment Process' Organized by B.G.E. Society, Akola	University Level	23 July 2017
5	<b>Chemistry</b>	<b>Dr. A.G. Sarap</b>	1. Workshop on 'NAAC-Accreditation and Assessment Process' Organized by B.G.E. Society, Akola	University Level	23 July 2017
6	<b>Microbiology</b>	<b>Dr. H.S Malpani</b>	India International Science Festival organized by Govt. India, DST. VIBHA, Govt. of TamilNadu Anna University, Chennai, TamilNadu	International Level	2017
7	<b>Microbiology</b>	<b>Ms. S.N. Gawande</b>	Pursuing Research in New contexts at SGBAU, Amravati	University Level	2017
8	<b>Physics</b>	<b>Dr. R.M. Agrawal</b>	1. One day Workshop on National Assesment and Acreditation Council Process (NAAC)	University Level	23 July 2017
			2. International Conference "Applied Nanotechnology and Nanoscience". (ICANN-2017)	International Level	7-9 Dec. 2017
			3. Consultation Meet on Scouting of Suggestion on Draft of UGC Regulation – 2018.	University Level	27 Feb. 2018

**श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला**

9	Physics	Mr. S.R. Jaiswal	National conference on Recent advance in chemical Science Shri Shivaji College of Arts, Commerce and Science, Akola (Abstract)	National Level	26-27 Feb. 2018
10	Zoology	Dr. S.M. Nagrale	Workshop on "NAAC Assessment and Accreditation Process" at Shri R.L.T.College of Science, Akola	University Level	23 July 2017
			Workshop on Melghat Forest Major	District Level	
11	Zoology	Dr. A.S. Sawarkar	Workshop on "Credit, Grade and Semester System Introduced by SGBAU and Maharashtra Public University Act, 2016" at Shri Shivaji College of Arts, Commerce & Science, Akola	University Level	22 July 2017
			Workshop on "NAAC Assessment and Accreditation Process" at Shri R.L.T. College of Science, Akola	University Level	23 July 2017
12	Zoology	Dr. S.R. Kohchale	One day Workshop on "NAAC Accreditation and Assessment." Shri R.L.T. College of Science, Akola	University Level	23 July 2017
13	Zoology	Dr. R.P. Joshi Sawalkar	1. 'Recent Advances in Chemical Sciences' at Shri Shivaji Science College, Akola.	National Conference	26 & 27 February 2018
			2. One day Workshop on "NAAC Accreditation and Assessment." At Shri R.L.T. College of Science, Akola.	University Level	23 July 2017
14	Botany	Ms. V.N. Badgujar	1. "NAAC Assessment and Accreditation Process" Berar General Education Society Shri R.L.T College of Science Akola	University Level	23 July 2017
			2. " Shewanti Lagvad va Savarrihan Karyashala"	Disrict	29 July 2017
15	Botany	Mr. P.M. Khadse	Recent trends in Biotechnology and Biodiversity, Shri Shivaji Science College, Amravati	National conference	22-23 Feb. 2018
16	Botany	Dr. A.A. Sangole	"NAAC Assessment & Accreditation Process" Berar General Education Society Shri R.L.T College of Science Akola	University Level	23 July 2017



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17	Botany	Mr. S.V. Madavi	1. One day Workshop on "NAAC Accreditation and Assessment." At Shri R.L.T. College of Science, Akola.	University Level	23 July 2017
			2. State Level Seminar on "Current Scenario of Botanical Research." At ShriShivaji College of Arts, Commerce and Science, Akola.	State	02 Feb 2018
			3. National conference on recent advances in chemical sciences. At Shri Shivaji College of Arts, Commerce and Science, Akola.	National	26 & 27 Feb. 2018
18	Electronic	Mr. R.D. Chaudhari	National Conference on Recent Innovations in Science and Engineering. College of Engg and Tech., Shegaon (MS) India	National	16 Sept 2017
19	Computer Science	Prof. R.B. Ghayalkar	1. One day Workshop on "NAAC Accreditation and Assessment." At Shri R.L.T. College of Science, Akola.	University Level	23 July 2017
			2. Recent Trends in Science and Technology, SSSKR Innani Mahavidyalaya Karanja (Lad)	International	22-23 March 2018

### 6. AVISHKAR (RESEARCH FESTIVAL) : UNIVERSITY LEVEL PARTICIPATION

Sr. No.	Name of Student	Category	Title of Project	Project Guide/ Supervisor	Date / Place
1.	Ms. Priya V. Wankhede	UG Pure Science	'Impact of idol immersion on water'	Dr. P.R. Kawle	S.G.B. Amravati University, Amravati (28-29 Dec. 2017)
2.	Ms. Shivani Tiwari	UG Medicine and Pharmacy	Extraction of Essential Oil from Orange peel	Mr. S.A. Toshniwal	
3	Ms. Apurva Shah	UG Medicine and Pharmacy	Antimicrobial activity of Cow urine against MDR strain	Dr. Harish Malpani	
4	Ms. Shruti Joshi	PG Humanites	AADHAR-India's unique innovation for robust Indian Economy		
5	Ms. Manisha Dhore	PG Agriculture & Animal Hsbandary	Composting of Nirmalya (flowers and leaves)		

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

6	<b>Ms. Shreya Relkar</b>	Pure Science	Thalassemia		
7	<b>Ms. Harsha Agarwal</b>	Pure Science	Flower processing for Industrial Utilisation		
8	<b>Ms. Mrunali Kashid</b>	PG Humanites	Healing herbs and spices	<b>Ms. S.N. Gawande</b>	
9	<b>Ms. Ruchita Dhole</b>	PG Medicine and Pharmacy	Spices against MRSA	<b>Ms. S.M. Morey</b>	
10	<b>Ms. Dnyaneshwari Hatolkar</b>	PG Medicine and Pharmacy	Antibacterial activity of Aegle marmelos	<b>Ms. S.M. Morey</b>	
11	<b>Ms. Varsha D.Yannewar</b>	PG Agriculture & Animal Hsbandary	'Preparation of Herbal Tablets for food grain preservation.'	<b>Dr. P.T. Agrawal</b>	
12	<b>Kanchan Mangtani</b>	Humanities PG-M.Sc.II	A study of Self-Defense and Self-dependent: Problems of women in modern era.	<b>Dr. R.D. Chandrawanshi</b>	
13	<b>Insiyah D. Vora</b>	PG-Mngmt, Law Commc, M.Sc.II	Financial issues of non sufficient widows	<b>Ms. S.B.Tadam</b>	
14	<b>Yash Vidyasagar</b>	Engn & Techn. UG- B.Sc.II	Robotic Arm controlled by hand gesture	<b>Mr. Vidyasagar</b>	

### 7. AVISHKAR (RESEARCH FESTIVAL) STATE LEVEL PARTICIPATION

Sr. No.	Name of Student	Category/ Class	Title of Project	Project Guide / Supervisor	Date / Place
1.	<b>Ms. Priya V. Wankhede</b>	UG-Pure Science B.Sc.III	'Impact of idol immersion on water'	<b>Dr. P.R. Kawle</b>	Mahatma Fule Agricultural University, Rahuri Ahmednagar. (15-17 Jan. 2018)
2.	<b>Ms. Varsha D. Yannewar</b>	PG-Agri & Animal Husbandry M.Sc.II	'Preparation of Herbal Tablets for food grain preservation.'	<b>Dr. P.T. Agrawal</b>	
3	<b>Insiyah D. Vora</b>	PG-Mngmt, Law Commc, M.Sc.II	Financial issues of non sufficient widows	<b>Ms. S.B. Tadam</b>	
4	<b>Kanchan Mangtani</b>	Humanities PG-M.Sc.II	A study of Self Defense and Self-dependent: Problems of women in modern era.	<b>Dr. R.D. Chandrawanshi</b>	

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

### 8. PH.D. WORK (REGISTERED / ONGOING / SUBMITTED / AWARDED)

Sr. No.	Department	Name of Researcher	Title of Ph.D. Thesis	University	Project Guide/ Supervisor
1	Chemistry	<b>Ms. Ketki D. Bansod</b> (Submitted)	Synthesis of analogues of polar flavonoids isolated from some Phyllanthus plants and studies of their antioxidant properties (Thesis submitted on 17/4/2018)	S.G.B. Amravati University, Amravati	<b>Dr. P.P. Deohate</b>
2	Botany	<b>Mr. P.M. Khadse</b> (Submitted)	Phytochemical Analysis and Anatomical Study of Some Unknown Medicinal Plants Used In Diabetes. (Thesis submitted on 8/09/2017)	S.G.B. Amravati University, Amravati	<b>Dr. V.R. Deshmukh</b>
3	Botany	<b>Mr. S.V. Madavi</b> (Ongoing)	Estimation of Nutritive Index of Some Wild Vegetables Used By Tribes of Gadchiroli District of Maharashtra State, India. (Registered on 18/04/2017)	Gondwana University, Gadchiroli.	<b>Dr. Mohan B.Wadekar</b>
4	Mathematics	<b>Ms. S.B. Tadam</b> (Submitted)	Study of uniform continuous spaces and compactness related concept in uniform spaces and proximity spaces. (Thesis submitted)	S.G.B. Amravati University, Amravati	<b>Dr. S.M. Padhye</b>
5	Mathematics	<b>Mr. S.B. Khobragade</b>	Study of Cantor, Cantor like sets, their Dimensions and their Application	S.G.B. Amravati University, Amravati	<b>Dr. S.M. Padhye</b>
6	Mathematics	<b>Ms. P.P. Umarkar</b>	Study of Uniformizable Topological spaces and its relation to compactness in Uniform and Proximity spaces	S.G.B. Amravati University, Amravati	<b>Dr. S.M. Padhye</b>
7	Mathematics	<b>Ms. R.D. Nannaware</b>	Properties of Spectral operators on Different Linear spaces	S.G.B. Amravati University, Amravati	<b>Dr. S.M. Padhye</b>

**Dr. Sushil M. Nagrale**  
Chairman  
Research Committee

## AVISHKAR - RESEARCH FESTIVAL

### REPORT

List of the students selected for University Level AVISHKAR Competition (PG Level)

Level	PG	Category	Humanities, Language and Fine Arts
Sr.No	Name of Students	Class/Batch	Topic
1	<b>Kanchan Mangatani</b>	M.Sc.II (Micro)	A study of Self defence and self dependent: Problems in Woman in Modern Era
2	<b>Mrunali Kashid</b>	M.Sc.II (Micro)	Healing herbs and spices

Level	PG	Category	Commerce, Management and Law
Sr.No	Name of Students	Class/Batch	Topic
3	<b>Insiyah D. Vora</b>	M.Sc.II (Maths)	Financial issues of non self sufficient Widows and Divorce Woman
4	<b>Shruti G. Joshi</b>	M.Sc.II (Micro)	AADHAR-India's unique innovation for robust Indian Economy

Level	PG	Category	Agriculture and Animal Husbandry
Sr.No	Name of Students	Class/Batch	Topic
5	<b>Varsha D. Yennewar</b>	M.Sc.II (Chem)	Preparation of Herbal tablets for food preservation
6	<b>Manisha U. Dhore</b>	M.Sc.II (Micro)	Composting of Nirmalya (flowers and leaves)

Level	PG	Category	Medicine and Pharmacy
Sr.No	Name of Students	Class/Batch	Topic
7	<b>Dnyaneshwari D. Hatolkar</b>	M.Sc.II (Micro)	Antibacterial activity of Aegle marmelos
8	<b>Ruchita D.Dhole</b>	M.Sc.II (Micro)	Spices against MRSA

Level	PG	Category	Pure Science
Sr.No	Name of Students	Class/Batch	Topic
9	<b>Shreya N Relkar</b>	M.Sc.II (Micro)	Thalassemia
10	<b>Harsha Agrawal</b>	M.Sc.II (Micro)	Flower processing for Industrial Utilisation

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

### List of the students selected for University Level AVISHKAR Competition (UG Level)

Level	UG	Category	Medicine and Pharmacy
Sr.No	Name of Students	Class/Batch	Topic
1	<b>Shivani Tiwari</b>	B.Sc.III (B1)	Extraction of Essential Oil from Orange peel
2	<b>Apurva R. Shaha</b>	B.Sc.II (B3)	Antimicrobial activity of Cow urine against MDR strain

Level	UG	Category	Pure Science
Sr.No	Name of Students	Class/Batch	Topic
3	<b>Priya Wankhade</b>	B.Sc.III (P4)	Comparative study of water pollution due to Idol immersion in Pinglakshi lake

Following student directly participate for AVISHKAR Competition at UG level under Category of Engineering and Technology

Level	UG	Category	Engineering and Technology
Sr.No	Name of Students	Class/Batch	Topic
1	<b>Yash Vidyasagar</b>	B.Sc.II (P1)	Robotic Arm controlled by hand gesture

Overall 14 students participated for University Level AVISHKAR 2017 Competition

(13 Students selected from District Level Competition and One students direct entry)

(3+1 from UG and 10 from PG Level)

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

### List of the students selected for State Level AVISHKAR Competition (UG & PG Level)

Level	PG	Category	Humanities, Language and Fine Arts
Sr.No	Name of Students	Class/Batch	Topic
1	<b>Kanchan Mangatani</b>	M.Sc.II (Micro)	A study of Self defence and self dependent : Problems in Woman in Modern Era

Level	PG	Category	Commerce, Management and Law
Sr.No	Name of Students	Class/Batch	Topic
2	<b>Insiyah D. Vora</b>	M.Sc.II (Maths)	Financial issues of non self sufficient Widows and Divorce Woman

Level	PG	Category	Agriculture and Animal Husbandry
Sr.No	Name of Students	Class/Batch	Topic
3	<b>Varsha D. Yennewar</b>	M.Sc.II (Chem)	Preparation of Herbal tablets for food preservation

Level	UG	Category	Pure Science
Sr.No	Name of Students	Class/Batch	Topic
4	<b>Priya Wankhade</b>	B.Sc.III (P4)	Comparative study of water pollution due to Idol immersion in Pinglakshi lake

- Total 4 (Four) students are selected for STATE Level AVISHKAR-2017 Competition.
- Four Students got Colour Coat for University Level AVISHKAR-2017 Competition.

**Dr. Sushil M. Nagrale**  
Chairman  
AVISHKAR Committee

## NATIONAL CADET CORPS

### REPORT

The strength of NCC Cadets in this year is 50 cadets.

#### Strength of Cadets in year 2017-18

Year	SD	SW	NCC Cdt
I	14	05	19
II	10	11	21
III	10	—	10
Total	34	16	50

It is pleased to highlight the activities run by NCC Unit

- The conference was organized in presence of Subheddar Major Busari on smooth conduction of International Yoga Day on 19<sup>th</sup> June.
- 25 NCC Cadets are take part and performing Yoga on the occasion of International Yoga Day which is held every year on 21<sup>st</sup> June at convocation hall of Dr. P.D.K.V. Akola.
- 08 NCC Boys Cadets & 03 NCC Girls Cadets are participated in the CATC Camp at Akot on 25<sup>th</sup> June. 2017.
- Enrollement of NCC cadets took place on 27<sup>th</sup> July 2017. There are total 16 girl cadets and 34 boy cadets was enrolled.
- 03 NCC cadets are selected for TSC Camp at Amravati.
- 25 NCC cadets with care taker Mr. P.P.Gedam celebrated Kranti Din in college campus in the presence of key address given by Hon'ble Principal Dr. V.D. Nanoty on 9<sup>th</sup> Aug. 2017.
- Two cadet Akash Nalwade and Ashish Ghumre is selected for TSC Camp which was held 16<sup>th</sup> Sept. 2017 to 1<sup>st</sup> Oct. 2017 at New Delhi.
- 14 Cadets are participated in Cycle Rally which is Organised by the District Collector on the Occasion of "Swach Bharat Mission" as a Swachtahi Seva on 1<sup>st</sup> Sept. 2017.
- 30 cadets are take part in "Shwachta Abhiyan" programme in which cadets with Care Taker clean the college campus on 17<sup>th</sup> Sept. 2017.

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- Felicitation of Akash Nalwade and Ashish Ghumre and Guidance and motivation lecture was organised by the college in presence of Dr. Bhalekar Sir, Mr. P.P. Gedam and Dr. R.M. Agrawal on 5<sup>th</sup> Oct. 2017.
- 08 Cadets are participated in CATC Camp which held at VMV Campus, Amravati from 07<sup>th</sup> Oct. to 16<sup>th</sup> Oct. 2017.
- 01 JW Cadets are participated in CATC Camp which is held at VMV Camp, Amravati form 25<sup>th</sup> Oct. 2017 to 3<sup>rd</sup> Nov. 2017, and one cadet Ritu Visvakarma has won a gold medal in "Extempore Speech".
- 11 Cadets JW/JD are participated in firing at 11 MAH BN NCC, Akola.
- The 07 NCC cadets are take part in "Blood Donation camp" at 11 MAH BN Akola on the occasion of NCC Day on dated 27. 11.2017.
- 22 Cadets are participated in Aids Day Cycle rally was organise by the District collector and Government hospital on dated 1.12.2017.
- 01 SD Cadets are participated in Gujarat tracking camp, Gujarat form 2 Dec. 2017 to 18 Dec. 2017, and one cadate Roshan Naik has 2<sup>nd</sup> rank in Tug of War competition.
- 27 Cadets were guided by Amol Patil, RTO office on the occasion Road Safety and Traffic awareness day of RLT College of Science which is organised by 11Mah BN on 16<sup>th</sup> Dec. 2017.
- On the occasion of Death Anniversary of Hon'ble former prin. M.G.Joshi sir NCC Unit of this college organise and participated in Blood donation Camp and Thelesemia detection camp in college auditorium in which 12 NCC Cadets donate blood on 24<sup>th</sup> Dec. 2017.
- 20 Cadets are participated in Morna River Cleaning Activity was organise by the 11 MAH BN NCC, Akola on dated 27 Jan. 2018.
- 05 Cadets are participated in Army attachment Trg MISC camp from 15<sup>th</sup> Jan. 2018 to 30<sup>th</sup> Jan. 2018 at Ahmad Nagar.
- 20 Cadets are appeared for B-cert exam- 2018.
- 08 Cadets are appeared for C-cert exam- 2018.
- Arranged lecture on BHIM App and Narendra Modi App and their uses by Praveen singh 11 MAH BN in which 37 cadets participated on dated 8.3.2018.

**Dr. Rohitkumar M. Agrawal**  
NCC Care - Taker



## राष्ट्रीय सेवा योजना

### नियमित कार्यक्रम

### अहवाल

- आपत्ती व्यवस्थापन कार्यशाळा - आव्हान २०१७ - अक्षय घोषे, आकाश काकडे, स्वराज खवणे यांची निवड करण्यात आली व आपत्ती व्यवस्थापन प्रशिक्षण शिबीर कोल्हापुर युनिव्हर्सिटी येथे घेतले.
- ३० ऑगस्ट २०१७ - रा.से.यो. स्वयंसेवक अतुल राऊत याला विद्यापीठाचा उत्कृष्ट स्वयंसेवक पुरस्कार मा. कुलगुरुंच्या हस्ते देवून गौरविण्यात आले.
- सल्लागार समितीची स्थापना व गठन - मा. प्राचार्य डॉ. विजय नानोटी यांच्या उपस्थितीत ४ ऑगस्ट रोजी सल्लागार समितीची स्थापना व गठन करण्यात आले. यात नियमित व विशेष शिबीरात घ्यावयाचे कार्यक्रम यावर चर्चा करण्यात आली.
- ६ ऑगस्ट २०१७ - रा.से.यो. उद्घाटन कार्यक्रमाचे आयोजन करण्यात आले.
- ७ ऑगस्ट २०१७ - महाविद्यालयात वृक्षरक्षा बंधन कार्यक्रमाचे आयोजन करण्यात आले. वृक्षांना राखी बांधून पर्यावरण संतुलन व झाडे वाचवा याचा संदेश देण्यात आला.
- १ ऑगस्ट २०१७ - महाविद्यालयाचे रा.से.यो. पथकाकडून स्वच्छता या विषयावर चर्चासत्राचे आयोजन करण्यात आले. यात स्वच्छ भारत स्वस्थ भारत अभियान यात विद्यार्थ्यांनी मते जाणून घेण्यात आली. विद्यार्थ्यांना प्राचार्यामार्फत स्वच्छता शपथ देण्यात आली.
- २ ते ५ ऑगस्ट २०१७ - या कालावधीत स्वयंसेवकांनी महाविद्यालयीन परिसर तसेच महाविद्यालयाची स्वच्छता केली. महाविद्यालयाच्या वर्गखोल्या, प्रयोगशाळा, ग्रंथालय, महाविद्यालयाचे सभागृह आणि सभोवतालचा परिसर पुर्णपणे साफ करण्यात आला. शौचालय तसेच प्रसाधनगृहाची स्वच्छता सुद्धा करण्यात आली.
- ६ ते १० ऑगस्ट २०१७ - या कालावधीत महाविद्यालयाच्या रा.से.यो. स्वयंसेवकांच्या विविध चमु बनविण्यात आल्या. वर उल्लेखित कालावधीत महाविद्यालय, दत्तक ग्राम सोनाळा येथे एक एक चमु भेट देत होती. घरोघरी जावून स्वच्छतेचे महत्व लोकांना पटवून दिले. गावामध्ये श्रमदानाच्या माध्यमातून गावातील रस्त्याची साफसफाई तसेच तुंबलेल्या नाल्यांची सफाई करण्यात आली.
- ९ ऑगस्ट २०१७ - क्रांती दिन - शहिदांना आदरांजली वाहून क्रांती दिन साजरा करण्यात आला.
- १३ ऑगस्ट २०१७ - महाविद्यालय नजिक असलेल्या गांधी जवाहर बागेत जावून स्वयंसेवकांनी संपुर्ण बगीचा स्वच्छ केला. बगीच्यात बसण्याच्या जागा, मुलांची खेळण्याची जागा इत्यादी ठिकाणी वाळलेले गवत काढून परिसर स्वच्छ केला. बागेच्या परिसरात असलेले महात्मा गांधी आणि जवाहरलाल नेहरू यांचे पुतळ्याच्या साफसफाई करण्यात

## श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

आली. स्थानिक प्रशासनाच्या मदतीने टॅकर बोलावून बगीच्यात पुतळे आणि रस्ते स्वच्छ करण्यात आले.

- १४ ऑगस्ट २०१७ - स्वच्छ भारत अभियान पंधरवाड्या अंतर्गत घेतलेले कार्यक्रमा अंतर्गत महाविद्यालयातून रॅली काढण्यात आली. स्वयंसेवक विविध फलक घेवून लक्ष्यवेधी घोषणा देत महाविद्यालयातून मार्गक्रमण करीत तसेच काही स्वयंसेवक रॅलीच्या रस्त्याची साफसफाई करीत पुढे चालत होते. ओला व सुका कचरा या विषयावर पथनाट्य सादर करण्यात आले.
- १५ ऑगस्ट २०१७ - स्वातंत्र्य दिनाच्या कार्यक्रमानंतर वृक्षारोपन कार्यक्रमाचे आयोजन करण्यात आले. तसेच सर्व साधारण सभेचे आयोजन करण्यात आले.
- २४ सप्टेंबर २०१७ - रा.से.यो. वर्धापन दिना निमित्त स्वच्छता हीच सेवा अभियान राबविण्यात आले. यात स्वच्छता विषयक माहितीपर पथनाट्य, रॅलीचे आयोजन, निबंध स्पर्धा व चित्रकला स्पर्धेचे आयोजन करण्यात आले.
- २ ऑक्टोबर २०१७ - महात्मा गांधी व लाल बहादुर शास्त्री यांचे जयंती निमित्त महाविद्यालयात स्वच्छता अभियान तसेच रॅलीचे आयोजन करण्यात आले. रा.से.यो. स्वयंसेवकांनी महात्मा गांधी यांची वेशभूषा साकारली व रॅलीचे प्रमुख आकर्षण ठरले.
- २६ नोव्हेंबर २०१७ - संविधान दिन - संविधान दिना निमित्त विद्यार्थ्यांना संविधान प्रिअॅम्बल चे सामुहिक वाचन करण्यात आले.
- २ डिसेंबर २०१७ - रेड रिबन क्लबची स्थापना व गठन. महाविद्यालयात व सिव्हील लाईन परिसरात रेड रिबन लावून जनजागृती करण्यात आली.
- १५ डिसेंबर २०१७ - सल्लागार समिती बैठक.
- २२ डिसेंबर २०१७ - स्व.म.गो. जोशी यांचा स्मृतिदिन २४ डिसेंबर या दिनाचे औचित्य साधून २२ डिसेंबर रोजी रक्तदान शिबीर, रक्तगट तपासणी शिबीर व थॅलेसिमीया चाचणी शिबीराचे आयोजन करण्यात आले. थॅलेसिमीया सोसायटी अकोला, जिवरसायनशास्त्र विभाग व रा.से.यो. यांच्या संयुक्त विद्यमाने कार्यक्रमाचे आयोजन करण्यात आले. सामान्य रुग्णालय रक्तपेढी, जिल्हा रुग्णालय यांचे सौजन्य लाभले. यात ५६ रक्तदात्यांनी रक्तदान केले. १८० विद्यार्थ्यांची रक्तगट तपासणी तर २०० विद्यार्थ्यांची थॅलेसिमीया चाचणी करण्यात आली.
- २ जानेवारी २०१८ ते ९ जानेवारी २०१८ - ग्राम सोनाळा येथे निवासी शिबीराचे आयोजन.
- १३ जानेवारी २०१८ - मा. जिल्हाधिकारी यांचे आवाहनाला प्रतिसाद म्हणून दि. १३-१-२०१८ रोजी मोर्णा स्वच्छतेत रा.से.यो. स्वयंसेवकांनी उपस्थिती दर्शविली. नदीत असलेली जलकुंभी तसेच तेथील कचरा विद्यार्थ्यांनी काढून त्याचे व्यवस्थापन केले. या उपक्रमात विविध संस्थांनी सुद्धा आपला सहभाग नोंदविला. विशेष म्हणजे या उपक्रमाचे मा. नरेंद्रजी मोदी पंतप्रधान यांनी 'मन की बात' या कार्यक्रमात नोंद घेतली व कौतुक केले.
- २४ जानेवारी २०१८ - वाहतुक जनजागृती कार्यक्रमाचे आयोजन करण्यात आले. यावेळी मा. विलास पाटी, पोलीस निरीक्षक, जिल्हा वाहतुक नियंत्रण शाखा यांनी मार्गदर्शन केले.
- २५ जानेवारी २०१८ - जागतीक मतदार दिन - जिल्हाधिकारी कार्यालयाद्वारे मतदार जागृती अंतर्गत महाविद्यालयात

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घोषवाक्य, रांगोळी, वादविवाद तसेच निबंध स्पर्धेचे आयोजन करण्यात आले. विजेत्यांना रा.से.यो. तर्फे पुस्तक देवून तर जिल्हाधिकारी कार्यालयातर्फे प्रशस्तीपत्र देवून सन्मानित करण्यात आले.

- १ फेब्रुवारी २०१८ ते ८ फेब्रुवारी २०१८ - या दरम्यान विद्यापीठ स्तरीय जिल्हानिहाय श्रम संस्कार शिबीरात कार्यक्रम अधिकारी यांनी क्षेत्रीय समन्वयक तसेच समन्वयक म्हणून कार्य केले.
- ३ फेब्रुवारी २०१८ - मोर्णा नदी स्वच्छतेत रा.से.यो. स्वयंसेवकांचा सहभाग.
- १० फेब्रुवारी २०१८ - महिला कार्यक्रम अधिकारी व स्वयंसेविका यांचा मोर्णा स्वच्छतेत सहभाग.
- २३, २४ फेब्रुवारी २०१८ - अकोल्यातील माता नगर येथे घडलेल्या गॅस सिलेंडर स्फोटात तेथील घरे उध्वस्त झाली. यात रा.से.यो. स्वयंसेवकांनी मदत कार्यात मोलाची भूमिका बजावली. शिक्षक वर्ग यांचे सहकार्याने रा.से.यो. स्वयंसेवकांनी जमा केलेल्या निधीच्या सहाय्याने प्रत्येक घरास ५ किलो तांदुळ, एक किलो पिठाचे वाटप केले व भोजनाची व्यवस्था सुद्धा केली.
- ८ मार्च २०१८ - महिला कार्यक्रम अधिकारी व स्वयंसेविका यांनी सायकल, स्कूटर रॅलीमध्ये सहभाग नोंदविला.
- २३ मार्च २०१८ - रा.से.यो. समारोपीय कार्यक्रमाचे आयोजन करण्यात आले. कार्यक्रम अधिकारींनी विस्तृत अहवालाचे वाचन केले. महाविद्यालयाच्या प्राचार्यांच्या अध्यक्षतेत हा कार्यक्रम पार पडला.

डॉ. सुधीर आर. कोहचाळे  
डॉ. रश्मी पी. जोशी (सावलकर)  
डॉ. समाधान एल. मुंडे  
कार्यक्रम अधिकारी  
राष्ट्रीय सेवा योजना

# चित्रांबिंब



स्व. प्राचार्य म.गो. जोशी यांच्या स्मृति दिनानिमित्त आयोजित रक्तदान, रक्तगट व थॅलेसिमिया चाचणी शिबीर



रा.से.यो. व जिल्हा वाहतुक नियंत्रण शाखा द्वारा आयोजित 'वाहतुक नियमाबाबत जनजागृती कार्यक्रम'



स्वच्छ भारत अभियान अंतर्गत महापुरुषांच्या पुतळ्यांची स्वच्छता करताना रा.से.यो. कार्यक्रम अधिकारी व स्वयंसेवक



रा.से.यो. द्वारा रेड रिबन क्लबची स्थापना निमित्त आयोजित कार्यक्रमात मार्गदर्शन करताना मा.डॉ. शिरसाट व उपस्थित स्वयंसेवक



गांधी जयंती निमित्त आयोजित रॅलीमध्ये सहभागी गांधीजींची प्रतिकृती साकारलेला रा.से.यो. स्वयंसेवक व इतर स्वच्छता अभियान राबवितांना



वृक्ष लागवड महोत्सव २०१७ अंतर्गत मलकापूर क्षेत्रात वृक्षारोपण करताना रा.से.यो. कार्यक्रम अधिकारी व स्वयंसेवक



अकोला येथील मोर्णा नदी स्वच्छता अभियानामध्ये सहभागी रा.से.यो. कार्यक्रम अधिकारी व स्वयंसेवक



माता नगर, अकोला येथील भीषण आगीमधील पिडीतांना मदत कार्य पोहोचवतांना रा.से.यो. कार्यक्रम अधिकारी व स्वयंसेवक

# चित्रबिंब



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे जिल्हा विधी सेवा प्राधिकरण अकोला द्वारा आयोजित कायदेविषयक मार्गदर्शन कार्यक्रम



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे महात्मा ज्योतिबा फुले जन आरोग्य योजना अंतर्गत मोफत चिकित्सा व औषधी वाटप



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे मा. रा.से.यो. समन्वयक डॉ. राजेश मिरगे यांची सदृच्छा भेट



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे उदघाटन प्रसंगी उपस्थित मा.डॉ. बी.जी. शेखर, प्राचार्य, पोलीस प्रशिक्षण केंद्र, अकोला



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे गावाची स्वच्छता करतांना रा.से.यो. स्वयंसेवक



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे श्रमदानांतर्गत शोषखड्यात पाणी जिरावे याकरिता नाली तयार करतांना रा.से.यो. स्वयंसेवक



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे रा.से.यो. स्वयंसेवक हात धुवा मोहिमे अंतर्गत शालेय विद्यार्थ्यांना स्वच्छता शिकवितांना



रा.से.यो. विशेष शिबीर ग्राम सोनाळा येथे जिल्हा परिषद शाळेतील विद्यार्थ्यांना खेळ साहित्य वाटप करतांना रा.से.यो. स्वयंसेवक

## राष्ट्रीय सेवा योजना

विशेष शिबीर - सोनाळा

अहवाल

(दि. २ जानेवारी २०१८ ते ९ जानेवारी २०१८)

दि. २-१-२०१८, मंगळवार :

दत्तक ग्राम सोनाळा येथे सर्व शिबीरार्थींचे आगमन. शिबीर पुर्व तयारी, गावकऱ्यांशी चर्चा, प्रकल्प पाहणी व श्रमदान पुर्व तयारी करण्यात आली.

दि. ३-१-२०१८, बुधवार :

दत्तक ग्राम सोनाळा येथील विशेष शिबीराचे उद्घाटन मा. डि.जी. शेखर, प्राचार्य, पोलीस प्रशिक्षण केंद्र, अकोला यांचे हस्ते झाले. यावेळी संस्थेचे अध्यक्ष मा. हेडा हे अध्यक्षस्थानी उपस्थित होते, तर प्रमुख उपस्थितीमध्ये महाविद्यालयाचे प्राचार्य डॉ. व्ही.डी. नानोटी, गावचे सरपंच डॉ. पुरुषोत्तम भटकर व ग्राम पंचायत सदस्य हे उपस्थित होते. उद्घाटनपर बोलतांना मा. बी.जी. शेखर यांनी विद्यार्थ्यांनी ध्येयाची आसक्ती ठेवावी व दृढ निश्चयी असावे असे आवाहन केले. डॉ. आर.बी. हेडा यांनी सर्वांगीण विकासात रा.से.यो. उपयोगी ठरत आहे असे सांगितले.

दि. ४-१-२०१८, गुरुवार :

सकाळच्या सत्रात प्रार्थना, स्फूर्तिगिते व रॅलीचे आयोजन करण्यात आले. श्रमदाना अंतर्गत शोषखड्डा निर्मितीचे कार्य सुरु करण्यात आले. दुपारच्या सत्रात मा.प्रा. महेश डाबरे यांचे ध्येय निश्चिती विषयावर व्याख्यान तर दहशतवाद प्रतिबंधात्मक योजना, मा. तपन कोल्हे व मा. पुनीत कुलट, सहायक पोलीस निरीक्षक, दहशतवाद प्रतिबंधक कक्ष, अकोला यांनी मार्गदर्शन केले. सायंकाळच्या सत्रात गमंत जंमत या कार्यक्रमातून सामाजिक बांधीलकी कशी जोपासावी हे हास्यविनोदातून सांगितले.

दि. ५-१-२०१८, शुक्रवार :

सकाळी योग प्राणायाम याचे धडे मा. देशमुख सर यांनी दिले आणि सुदृढ आयुष्यावर मार्गदर्शन केले. दुपारच्या सत्रात पर्यावरण संतुलन काळाची गरज या विषयावर डॉ. आय.ए. राजा, विभाग प्रमुख, प्राणीशास्त्र विभाग यांनी मार्गदर्शन केले. सायंकाळच्या सत्रात देशभक्तीपर गीताचे आयोजन सिताबाई कला महाविद्यालयाच्या संगीत विभागाने केले.

दि. ६-१-२०१८, शनिवार :

महात्मा ज्योतिबा फुले जन आरोग्य योजना व शासकिय रुग्णालय, अकोला यांच्या संयुक्त विद्यमाने मोफत आरोग्य तपासणी व औषधी वितरणाच्या कार्यक्रमाचे आयोजन करण्यात आले. या शिबीराचा एकूण ३६० ग्रामस्थांनी लाभ घेतला. याचे आर्थिक मुल्यांकन तपासणीचे व औषधीचे अनुक्रमे रु. १,०८,०००/- व रु. ६०,०००/- याचा लाभ शालेय विद्यार्थ्यांनी तसेच गावकऱ्यांनी घेतला. याच दिवशी मा.डॉ. स्वप्ना लांडे व श्री. धम्मदिप इंगळे यांचे मार्गदर्शनात अंधश्रद्धा निर्मूलन व

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वैज्ञानिक दृष्टीकोन या विषयावर कार्यक्रमाचे आयोजन करण्यात आले. यात अंधश्रद्धा निर्मुलन व जादुटोना कायदा यावर मान्यवरांनी मार्गदर्शन केले. सायंकाळच्या सत्रात मा. वसंतराव मानवटकर लोकशाहीर यांचा विनोदात्मक तुमडी गायनाच्या कार्यक्रमाचे आयोजन करण्यात आले. यात त्यांनी बेटी बचाव, हागणदारी मुक्त गांव, पर्यावरण संतुलन, हुंडाबंदीवर मात, मतदार जागृती या विषयावर उद्बोधन केले.

**दि. ७-१-२०१८, रविवार :**

सकाळी श्रमदाना अंतर्गत शोषखड्डा निर्मिती करण्यात आली. दुपारच्या सत्रात वित्तीय साक्षरता बिटकॉईन या विषयावर प्रा. रूईवाले यांनी मार्गदर्शन केले. आजचा युवक व युवकांचे वाढते व्यसन या विषयावर डॉ. अजय उपाध्याय, गायत्री परिवार हे उपस्थित होते व युवकांना उद्बोधित केले. यावेळी त्यांचे सोबत उपस्थित गायत्री परिवार मंडळींनी व्यक्तिमत्व विकास, योगा व प्राणायाम यावर सुद्धा मार्गदर्शन केले. सायंकाळी जिल्हा विधीसेवा प्राधिकरण, अकोला येथील चमु उपस्थित झाली, यात वरीष्ठ व कनिष्ठ स्तर न्यायाधिश तसेच वकिल मंडळी उपस्थित होते. कार्यक्रमाचे अध्यक्ष मा. मोतिसिंहजी मोहता हे होते. यात मान्यवरांनी वैकल्पिक वाद निवारण पद्धती, नागरिकांचे मुलभूत अधिकार, विधी सेवा साक्षरता यावर मार्गदर्शन केले.

**दि. ८-१-२०१८, सोमवार :**

योग प्राणायाम, रॅली, स्फूर्ती गिते तसेच श्रमदाना नंतर एड्स जनजागृती या विषयावर डॉ. यु.के. भालेकर यांनी मार्गदर्शन केले. तसेच सायंकाळच्या सत्रात विद्यार्थ्यांमध्ये कलागुणांना वाव मिळावा म्हणून सांस्कृतिक कार्यक्रमाचे आयोजन करण्यात आले. यात विविध नृत्य, नाट्य, एकपात्री प्रयोगाचे सादरीकरण विद्यार्थ्यांनी केले.

**दि. ९-१-२०१८, मंगळवार :**

सोशल मिडीया व समाज या विषयावर डॉ. हरिष मालपाणी यांनी युवकांवर होणारा इंटरनेटचा प्रभाव परिणाम यावर मार्गदर्शन केले. तसेच महिला मेळाव्याचे आयोजन करण्यात आले. यात रानमाजी स्पर्धा घेण्यात आली. तसेच रानभाजी व पोषक तत्वे या विषयावर वनस्पती शास्त्र विभाग प्रमुख श्रीमती वैशाली बडगुजर यांनी मार्गदर्शन केले. तीन स्पर्धकांना अनुक्रमे पारितोषिक देण्यात आले. रसायनशास्त्र विभागातील विद्यार्थ्यांनी व येथे उपस्थित मान्यवरांनी अन्नातील भेसळ ओळखण्याबद्दल महिलांना मार्गदर्शन केले. ग्राम सोनाळा येथील शालेय विद्यार्थ्यांना पेन, पेन्सील तसेच शालेय वस्तुंचे वाटप करण्यात आले.

शिबीर समारोपीय कार्यक्रमात गावचे सरपंच, कार्यकारीणी सदस्य मा. सत्यनारायणजी बाहेती, तसेच प्राचार्य डॉ. विजय नानोटी हे उपस्थित होते. कार्यक्रम अधिकारींनी विस्तृत अहवालाचे वाचन केले. तर मान्यवरांनी शिबीर यशस्वीते विषयी शुभेच्छा दिल्या. सरपंच तसेच गावकऱ्यांनी महाविद्यालयाचे शिबीर आयोजनाकरीता विशेष आभार मानले.

**डॉ. सुधीर आर. कोहचाळे**  
**डॉ. रश्मी पी. जोशी (सावलकर)**  
**डॉ. समाधान एल. मुंडे**  
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राष्ट्रीय सेवा योजना

श्री राधाकिसन लक्ष्मीनारायण तोष्णीवाल विज्ञान महाविद्यालय, अकोला

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Inauguration of Biodiversity Calendar at the hands of Hon'ble Dr. R.B. Heda



Visit of Hon'ble Dr. Murlidharji Chandekar, Vice Chancellor, S.G.B. Amravati University, Amravati to Botanical Garden



Inaugural Ceremony of Digital Gallery of Museum Specimens of Dept. of Zoology



Lecture by Mr. Mangesh Ubale, Librarian on topic 'Importance of E-Library' organised by Dept. of Zoology



Winners of Online Assessment Test of Spoken Tutorial Project, IIT Bombay organised by Dept. of Computer Science



Students selected for State Level Research Festival AVISHKAR-2018



Winners of Creative Writing Competition organised by Dept. of Languages & Library



Guest Lecture by Mr. Harshal Tupsamudre, Researcher, TCS organised by Dept. of Computer Science



Ms. Sarika Surwade receiving Gold Medal for standing 1st Merit in M.Sc. (Microbiology), Summer-2017, Examination at the hands of Hon'ble V.C. Dr. Murlidhar Chandekar in 34th Convocation of S.G.B. Amravati University, Amravati



Inauguration of renovated & newly established Microbiology Laboratory (UG), Department of Sports & Physical Education, College Examination Centre, Career Counseling Cell & Office Record Section at the hands of Hon'ble Dr. Rajiv Borle, V.C., Datta Meghe Institute of Medical Sciences, Sawangi (M), Wardha & in presence of Hon'ble Dr. Ranjitji Patil, Guardian Minister, Aka Hon'ble Shri Gopikishanji Bajoria, MLC, Dr. R.B. Heda, Adv. Motisinghji Mohta & other Executive Members of B.G.E. Society, Akola

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