

**SHRI SHIVAJI COLLEGE OF ARTS, COMMERCE AND SCIENCE,
AKOLA.**

Departmental Profile

- 1. Name of the Department : CHEMISTRY**
- 2. Year of Establishment : UG : 1967**
PG : 1992
Ph.D. : 2000

UGC approved Carrier Oriented Programme in Analytical Chemistry from 2006

3. Details of the staff members Senior College:

Name of the faculty members	Educational Qualification	Designation	Experience		Specialization
			Teaching	Research	
1. Dr. K. N. Puri	M.Sc., B.Ed. SET, Ph.D.	Professor & Head	24 Years	10 Years	Organic Chemistry
2. Dr. R. E. Bhadange	M.Sc., Ph.D.	Professor	17 Years	17 Years	Organic Chemistry
3. Mr. G. M. Dongre	M.Sc., B.Ed. SET	Associate Professor	20 Years	07 Years	Inorganic Chemistry
4. Dr. S. S. Kadu	M.Sc., SET Ph.D.	Associate Professor	17 Years	07 Years	Organic Chemistry
5. Dr. S. M. Thorat	M.Sc. B.Ed. M.Phil. Ph.D	Associate Professor	15 Years	10 Years	Physical Chemistry
6. Dr. G. W. Belsare	M.Sc., Ph.D.	Associate Professor	15 Years	15 Years	Organic Chemistry
7. Dr. S. G. Badne	M.Sc., B.Ed. Ph.D.	Associate Professor	15 Years	15 Years	Organic Chemistry
8. Mr. M. A. Pawar	M.Sc., SET.	Assistant Professor	12 Years	02 Years	Organic Chemistry
9. Dr. M. T. Sangole	M.Sc. B.Ed. M. Phil Ph.D.	Assistant Professor	09 Years	09 Years	Organic Chemistry
10. Dr. A. V. Yadgire	M.Sc., Ph.D.	Assistant Professor	03 Years	03 Years	Organic Chemistry
11. Ms. K. V. kumbhalkar	M.Sc., SET	Assistant Professor	02 Years	02 Years	Organic Chemistry
12. Dr. Abdul Wajid	M.Sc., B.Ed. Ph.D.	Assistant Professor	02 Years	02 Years	Organic Chemistry
13. Mr. Zamir S. Shekh	M.Sc., NET GATE	Assistant Professor	02 Years	02 Years	Organic Chemistry
14. M. M. Mhassal	M.Sc., B.Ed. Ph.D.	Assistant Professor	02 Years	02 Years	Organic Chemistry
15. Dr. A. M. Mopari	M.Sc., B.Ed. NET; SET	Assistant Professor	02 Years	02 Years	Organic Chemistry

16. Mr. N. A. Deshmukh	M.Sc., B.Ed. NET; SET, GATE	Assistant Professor	02Years	02Years	Organic Chemistry
17. Dr. D. S. Deshmukh	M.Sc., B.Ed. SET, GATE Ph.D.	Assistant Professor	02Years	02Years	Organic Chemistry

4. Details of the staff members of Junior College:

Name of the faculty members	Educational Qualification	Designation	Teaching Experience	Specialization
1. Mr. R.R. Bhalerao	M.Sc. B.Ed. M. Ed.	Jr. College Teacher	03 Months	Bio-Chemistry
2. Ms. R.A. Wankhade	M.Sc. B. Ed.	Jr. College Teacher	03 Months	Bio-Chemistry
3. Mr. B.B. Raner	M.Sc. B. Ed.	Jr. College Teacher	03 Months	Analytical Chemistry
4. Mr.V.R. Adhav	M.Sc. B. Ed.	Jr. College Teacher	03 Months	Organic Chemistry

5. Details of administrative/technical staff:

Sr.No.	Name of Technical Staff	Qualification	Designation
1.	Mr. S.G. Thorat	B.Com	Laboratory Attendant
2.	Mr. D. B. Deshmukh	H.S.C.	Laboratory Attendant
3.	Mr. P. R. Kale	H.S.C	Laboratory Attendant
4.	Mr. G.R. Solanke	H.S.C.	Laboratory Attendant
5.	Mr. A. A. Andhare	H.S.C.	Laboratory Attendant
6	Mr. M.S. Bakhare	B.A	Laboratory Attendant (Contract)

6. Student profile to programmes:

Course	Men	Women	Total	Demand ratio
B.Sc.	402	583	985	1:2
M.Sc.	08	75	83	1:5
Ph.D.	07	03	10	----

7. Success rate of each programme, its comparison with University results, Merit list

Programme	2016-17	2017-18	2018-19	2019-20	2020-21
B.Sc.	59.05%	65.13%	60.61%	82.16%	96.83%
M.Sc.	49.06%	67.28%	54.95%	75.52%	99.39%

- The success rate of UG and PG students in the subject chemistry of our institution is quite higher than the UG and PG results of Sant Gadge Baba Amravati University, Amravati
- The success rate of UG and PG courses in the subject Chemistry as shown in table above for last five years.

- The dropout rate of PG is zero.

8. Number of faculty members on University Bodies/and other academic bodies and social organizations. The role in curriculum designing and college development.

Faculty Member	University Bodies/Academic bodies/Social organizations
Dr. K.N. Puri	Member of Research Recognition Committee SGB Amravati University. Secretary, Amravati University Chemistry Teachers Association
Dr. S.M. Thorat	Executive Member, Amravati University Chemistry Teachers Association

9. Syllabus link of page of Chemistry subject syllabus from SGBAU.

The syllabus of the UG and PG courses are designed by SGB Amravati University, Amravati. The syllabus of UG was revised in 2005-06 and P.G in 2007-08 with semester pattern being introduced for P.G. Both of these faculty members have active contribution in reframing the syllabus.

B. Sc. I (Sem I and Sem- II) -

https://sgbau.ac.in/Syllabus/pdf/Science/BSc_Part-I_Sem-I-II.syll-2013.pdf

B. Sc. II(Sem III and IV) -

https://sgbau.ac.in/Syllabus/pdf/Science/BSC_Part-II_Sem_III_IV_Syll-2014.pdf

B. Sc. III (Sem V and VI) -

https://sgbau.ac.in/Syllabus/pdf/Science/syl-BSc_Sem-V-VI-2015.pdf

M. Sc. (Sem I to IV) -

https://sgbau.ac.in/Syllabus/pdf/Science/MSc_Chemistry_2014.pdf

10. Learning resources of Department (Laboratories, Computers/Internet/Departmental library etc.)

- Departmental Laboratories: Separate Laboratories for U.G., P. G .and Research.
- Computers/ Internet-Seven Systems with broadband connectivity.
- Departmental library with more than 250 Titles.
- Seminar hall with audio-visual facility of Smart Board, LCD projector and OHP

11. Enhancement of the resource during last five years.

- Wi-Fi and audio visual facility and also the facilities to manage online classes is the addition during this period.
- Seminar hall, separate room for departmental library and Internet has been made available for the students and faculty.
- Study tours are conducted every year to visit national research laboratories and industries to make the students aware of the developments occurring in the present day environment.
- Guest Lectures of Specialist Scientist and teachers in fields related to chemical sciences are arranged under the auspicious of Chemical Society.

12. Modern teaching methods.

- The faculty members actively make use of audio visual aids to make the teaching learning process more effective. The separate Google classrooms have been created for UG and PG to make teaching learning process smooth and effective.
- Along with books the faculty members also make use of internet in up gradation of the teaching

material. With the modern audio visual aids, the faculty members also make use of models and charts in the process of teaching. To make the teaching learning process more efficient the students are encouraged to deliver seminars and participate in group discussion, quiz competitions etc.

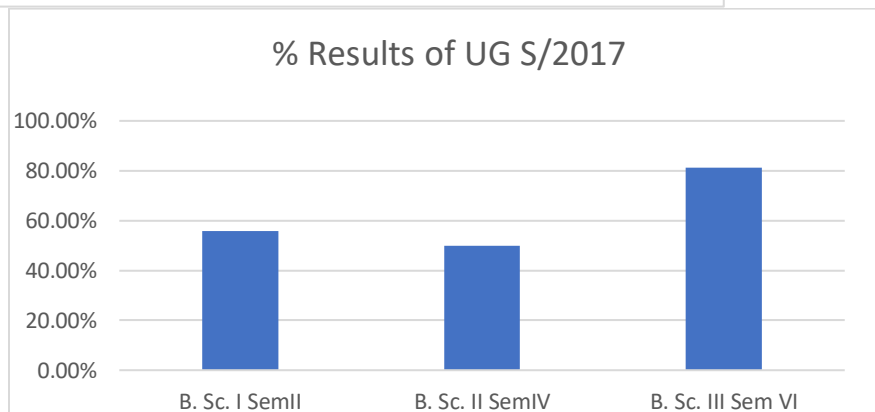
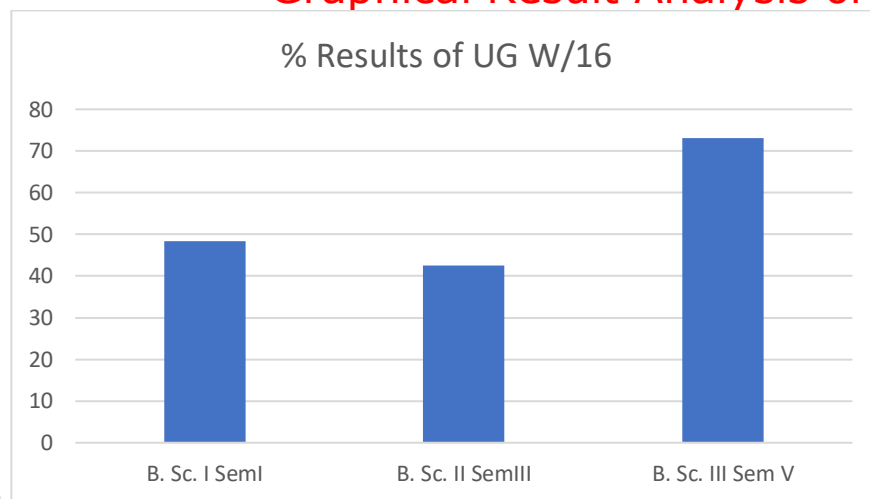
13. Department organized the conferences/workshops/seminars etc.

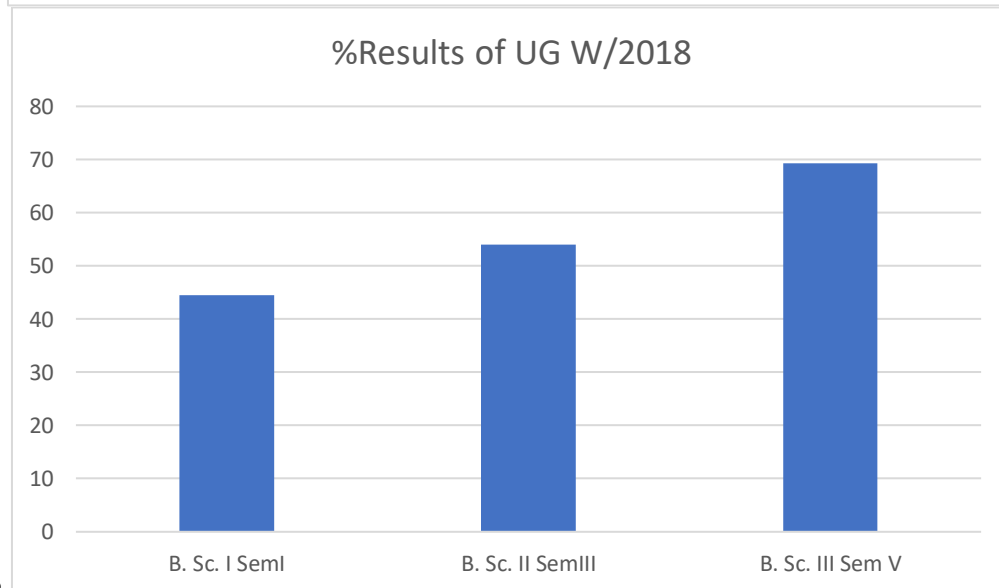
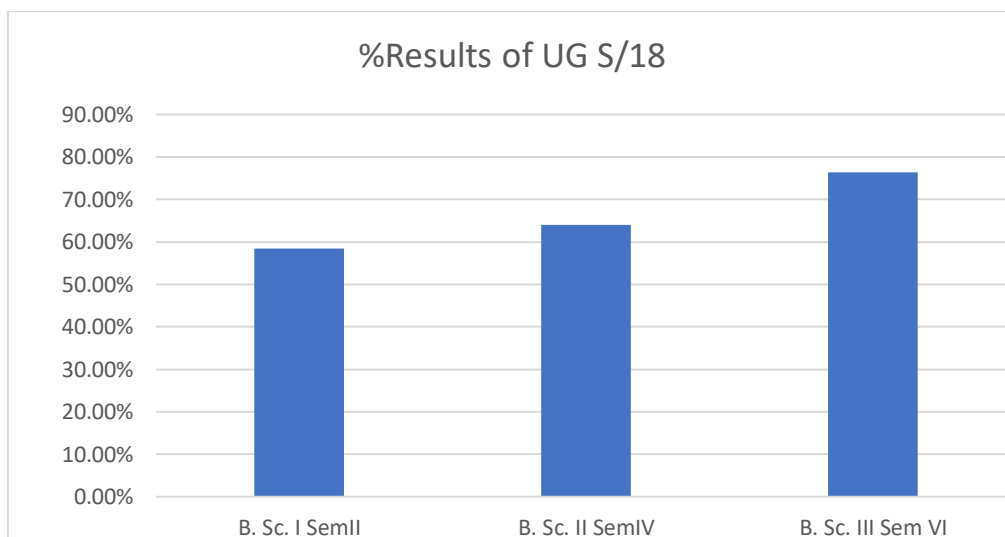
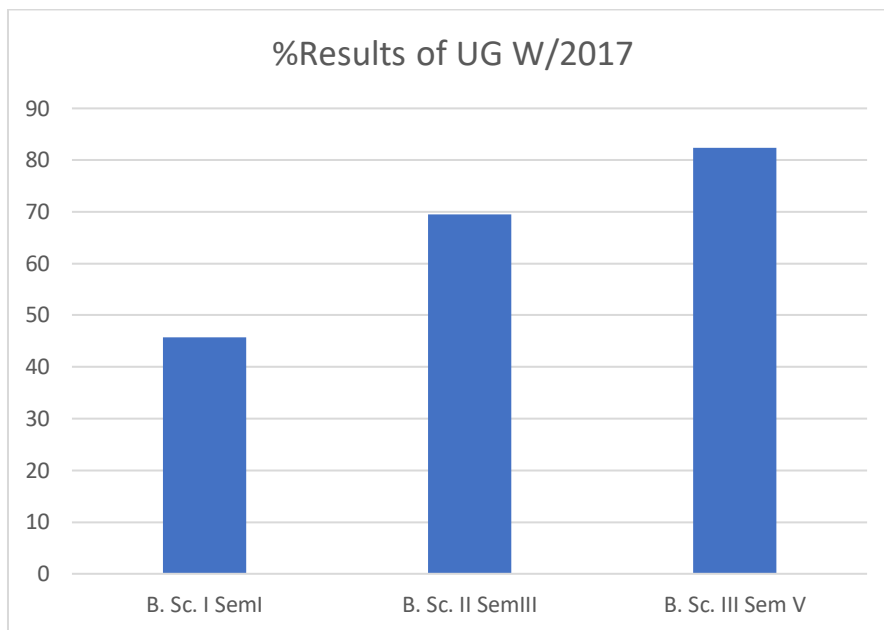
- Chemi-Quiz ‘an intercollegiate Quiz Competition was organized by department for B.Sc. I students on 11/02/2017.
- Department has successfully organized two-day **National Conference on Recent advances in Chemical Sciences** on the eve of Professor (Dr.) S.P Deshmukh on 26th and 27th February 2018.

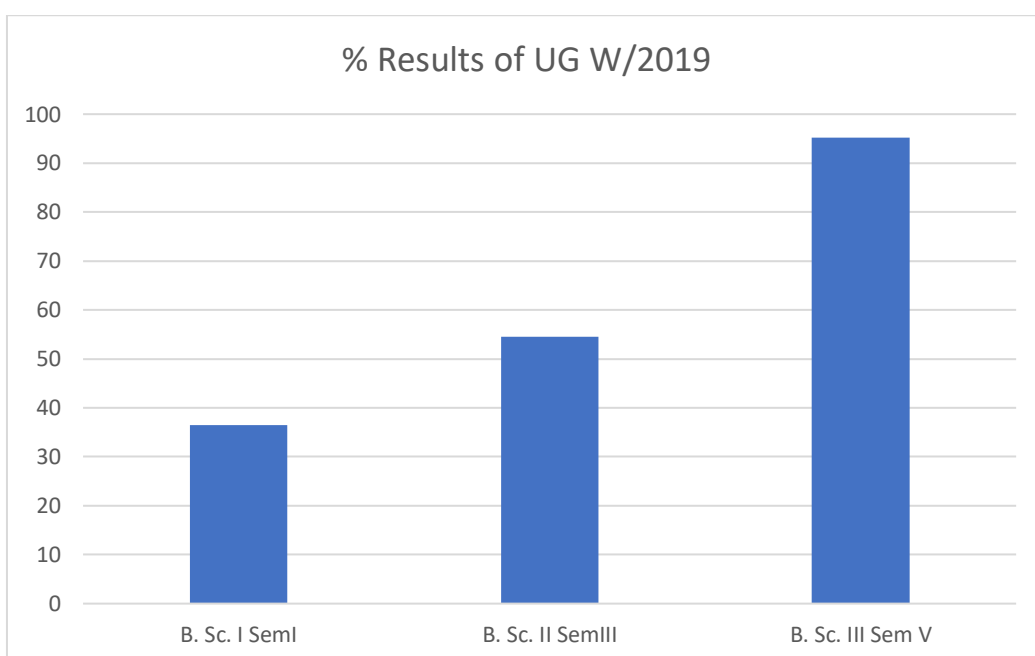
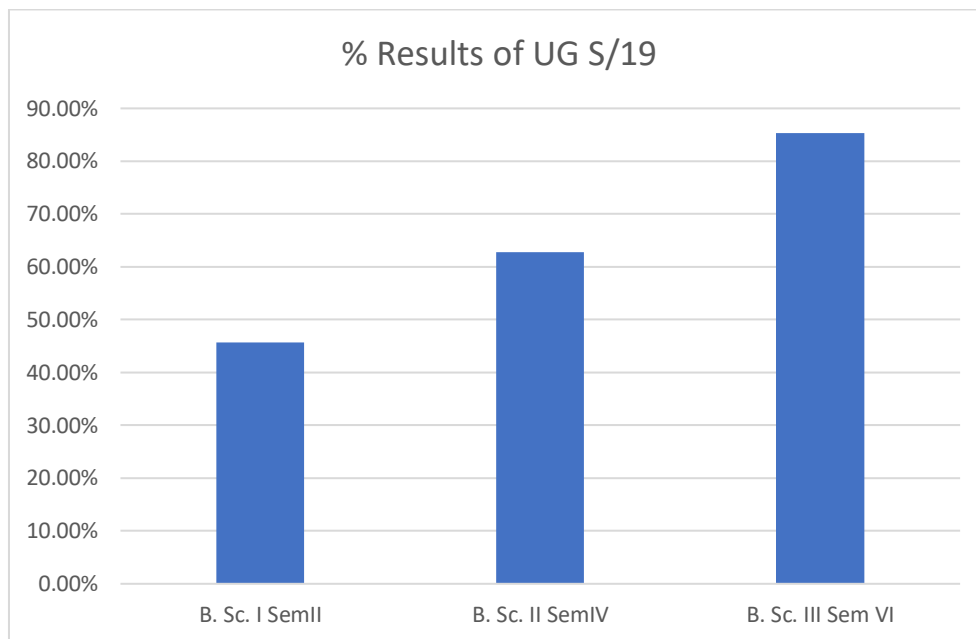
14. ‘Evaluation process’.

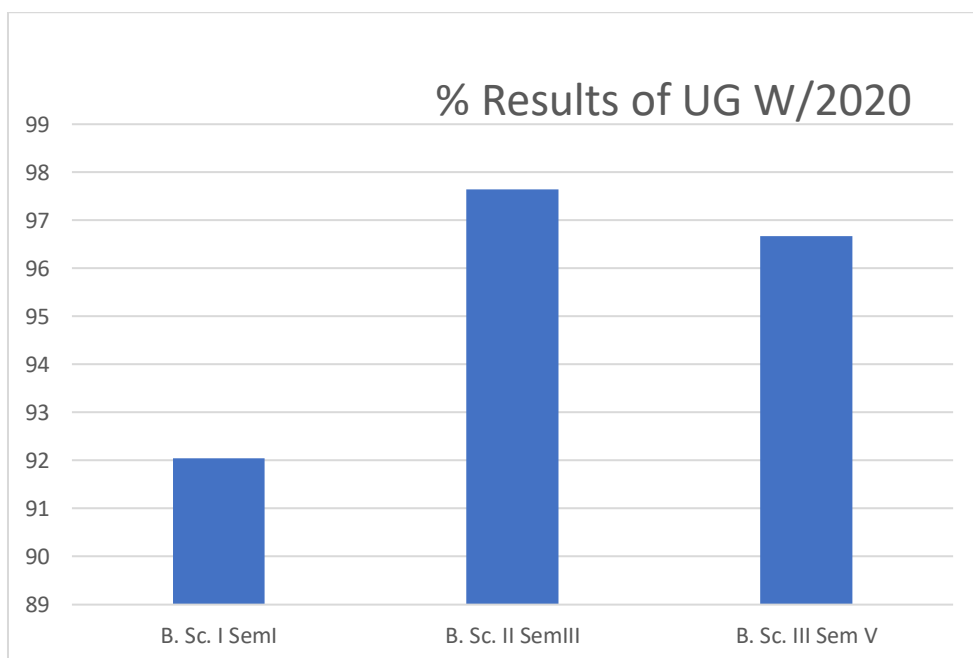
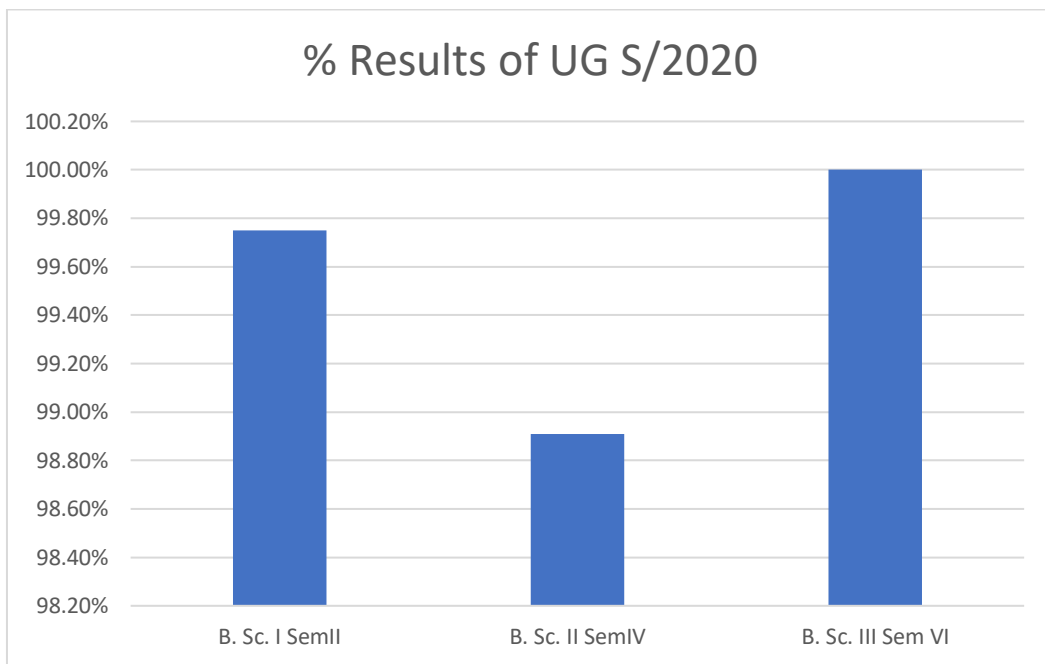
- Evaluation of teaching learning process is done on the basis of regular Unit Tests and Annual Test Examinations in both theory and practical.
- The evaluation is also carried by arranging Quiz, seminars and group discussions on syllabus topics.

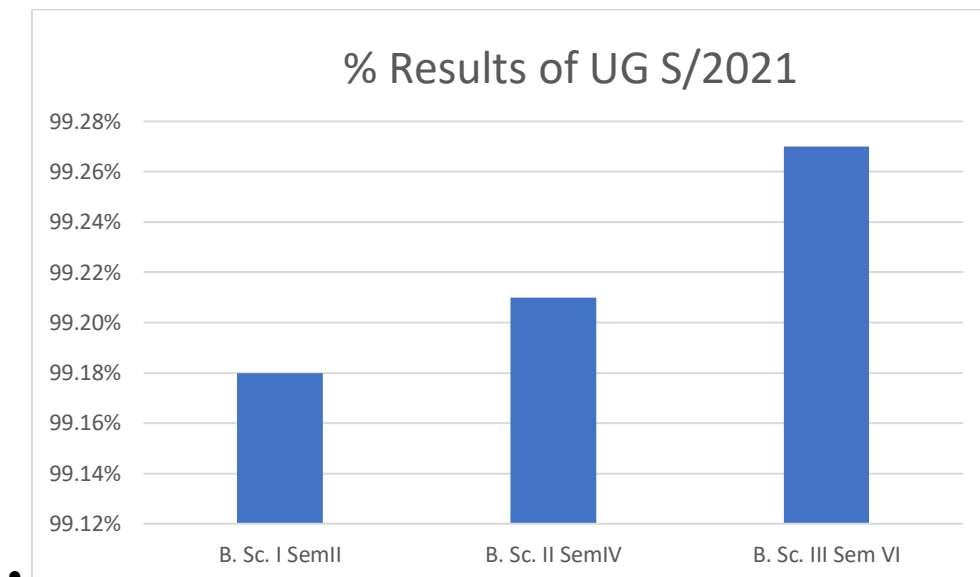
• Graphical Result Analysis of UG











15. Participation of teachers in academic activities other than teaching and research.

- The teachers participate in co-curricular and extra-curricular activities in the department and in the College.
- The teachers of the department worked in the organization committees of several activities like conferences, seminars, youth festivals and sport meets.
- All the faculty members of the department have worked in various activity of University like paper setting, paper moderation, paper valuations, practical examiner etc.
- The Department has Chemical Society, under the aegis of which guest lectures, study tours, cultural programs are conducted.

15. Research activities		
	• M.Phil. Dissertations:	02
	• Ph.D. Completed / thesis Submitted • Ph.D. students registered:	Completed: 11 Submitted: Nil Registered: 07
	• Recognized Ph.D. Supervisors:	08 Dr. K. N. Puri Dr.R. E. Bhadange Dr. S. S. Kadu Dr. S. M. Thorat Dr. G.W. Belsare Dr. S. G. Badne Dr. M.T. Sangole Dr. G.V. Korpe (On lean)

16. Books published by the staff

Sr. No.	Name of faculty	Title of Book Published
1	Mr. K. N. Puri	1. Text book of Inorganic Chemistry B.Sc. III Bokey publication, Amravati. 2. Principles of UV-Visible and IR Spectroscopy, Nabha Prakashan. Amravati 3. Principles of NMR and Mass Spectroscopy Nabha Prakashan, Amravati. 4. Organic Chemistry, Nabha Prakashan, Amravati.
1.	Dr. S.S. Kadu	1. Text book of Organic Chemistry B. Sc. II Bokey publication, Amravati.
2	Dr. S.M. Thorat	“A Text Book of Chemistry” of third Semester of B.Sc. Part II, Unit V (3S Chemistry), Dnyapath Publication, Amravati /
3	Dr. G. W. Belsare	Text book of Organic Chemistry B. Sc. I Sem I Dnyanpath publication, Amravati.
4	Dr. M.T. Sangole	“A Text Book of Chemistry” of Fourth Semester of B.Sc. Part II, Unit V (4S Chemistry) (Colligative properties of Dilute Solution) Prashant Publication, Jalgaon -2014

16. Research Paper Last Five Year

<https://drive.google.com/drive/folders/1an9Yh-A1zxvV4s45HwrvYd3YgALqYkli?usp=sharing>

17. Participation of the department in extension activities

Department carry out a wide range of social and community service initiatives. There are large number of activities undertaken by the students and staff for the benefit of community. These activities are need based. The broad areas of extension activities are analysis of soil, water, Fertilizer and food adulteration detection. Environment awareness through science exhibition. Funds collection for poor students.

18. Achievements of the students during last five years:

➤ Participation of P.G. Students of Chemistry Department in Intercollegiate Seminar Competition Organized by Amravati University Chemistry Teachers Association in Collaboration with P.G. Department of University/College in last five years.			
Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award
Intercollegiate chemi quiz competition For B.Sc I	Mr. Ajay S. Band & Taleya Firoz Ali Khan Consolation Prize	Amravati University Chemistry Teachers Association Amravati	11/02/2017
Intercollegiate Seminar Competition of <u>M.Sc.</u>	Aakanksha P. Pinjarkar	Jagdamba Mahavidhyalaya Achalpur	18/10/2019
	2nd Rank		
International year of the Periodic Table of Chemical elements (IYPT 2019)	Aakanksha P. Pinjarkar	Shri Shivaji College of Arts Commerce & Science Akola	16/09/2019
	1st Rank		
Intercollegiate Poster Competition organized on Green chemistry & Periodic Properties of element	Komal S. Pote	Shri RLT College of Science Akola	19/10/2019
	1st rank		
International year of the Periodic Tableof Chemical elements (IYPT 2019)	Taleya Fatema Khan	Shri Shivaji College of Arts Commerce & Science Akola	16/10/2019
	2nd Rank		
	Aakash Sardar		
Intercollegiate Poster Presentation competition	Aakanksha P. Pinjarkar	Brijlal Biyani Science College Amravati	01/02/2020
	3rd Rank		

19. Achievements of the staff members during last five years

- Department of Chemistry hosts Chemistry Talent search Examination conducted by M.J. College, Jalgaon for B.Sc.I students from Akola District.
- Renowned teachers and scientist in the field of Chemical Sciences are invited to deliver lectures under the auspicious of chemical society.
- The department arrange chemistry aptitude test in collaboration with Amravati University Chemistry Teachers

Association for the students of B.Sc. III to make them familiar with various entrance examination required for PG courses.

- The UG and PG students of the department have actively participated in inter collegiate competitions like Quiz, Seminars and have bagged the prizes.
- The department has to its credit **01** major research project entitled, “Special distribution of uranium and associated water quality parameters in three district of Amravati Division (Amravati, Akola and Washim)” sanctioned by Board Research in Nuclear Sciences (BRNS) Mumbai, 2016-18 Total Grant 26,97,300/- which has been completed. This project proved very beneficial for the department in many ways like through these projects modern instruments, books and journal were procured by the department.
- Within last five years **10** research students of the department have been awarded Ph.D.
- The department of Chemistry has run UGC approved Carrier oriented Programme in Analytical Chemistry i.e. Certificate, Diploma and Advanced Diploma in Analytical Chemistry.
- Department has patent in its account entitled “Process for the preparation of Central Nervous System (CNS) Stimulant Prolintane” 14/10/2017.

20. **Action Plan during next five years**

- Laboratory infra structure up-gradation.
- Updating Teaching and Research facilities in the department.
- To increase the number of books and journals in departmental library also to subscribe e-journals.
- To start consultancy services for the benefit of Vidharbha region.
- Introduction of industry department inter action in research and placement of students.
- To make efforts for increasing success rate of students at various competitive examinations like NET, GATE etc.
- To increase number of patents.

21. **Important alumni of the department**

Name of the Alumni	Designation	Job Location
Dr. Pralhad A. Ganeshpure	Former General Manager	Reliance Industries Ltd. Vadodara
Shailesh Kolhe	Scientist	DRDO, Jodhpur
Dr. Sharad. V. Lande	R & D-Nobel Metal Catalysis Group Lead	(R & D) Reliance Industries Ltd, Reliance Research and Development, Reliance Corporate Park, Thane -Belapur Road, Ghansoli, Navi Mumbai - 400701
Dr. Gajanan V. Korpe	Principal	Shri Shivaji Science College, Amravati
Dr. Poonam T. Agrawal	Associate Professor Head	Shri R.L.T. College of Science, Akola

Dr. Dattatraya V. Mangte	Assistant Manager Chemical R & D	Concord Biotech Ltd., Dholka Ahmedabad, Gujarat
Dr. Nitin Agrawal	Senior Manager	Quality Assurance Department, Ajanta Pharma, Paithan
Dr. Sameer Deshpande	Manager Quality Assurance & Regulatory	Anthea Aromatics, Rabale, New Mumbai
Dr. Shrikant M. Varma	General Manager Head API Chemical Synthesis R & D	Dr. Reddy's, Lupin, Teva-actavis Torrent, Amneal, Cadila, Bengaluru
Dr. M. Mujahid	Assistant Professor	Shri Dr. RG Rathod Arts and Science College, Murtizapur
Dr. Prashant V. Tale	Senior Research Associate	Lupin Limited, Genesis Square building. Hinjewadi Phase-II, Pune -411057
Dr. Nishant V. Tale	R & D Scientist	Aarushi Specialty Chemicals, Pune
Dr. Rajesh Kumar Singh	Manager, Cosmeceuticals F R & D	Sami Labs Limited, 19/1 & 19/2, I Main, II Phase, Peenya Industrial Area, Bengaluru, Karnataka
Dr. Rachna Khatri	Sr. Executive -Regulatory Affairs APAC	Galaxy Surfactants Ltd., MUMBAI
Shrikant Dose	Executive R & D	Torrent Pharma Ltd., Ahmedabad
Dr. Aparna S. Kadam	Manager (R & D and QC)	Santej, Dist: Kalol, Gandhinagar
Dr. Abdul Rahim	R & D Scientist	Sapala Organics Private Limited. Plot Nos. 146B & 147 IDA Mallapur, Phase-II, Hyderabad
Dr. Irfan Khan Umrao Khan	Post-Doctoral Fellow	The WISTAR INSTITUTE, Philadelphia
Sagar B. Ingole	Assistant Police Inspector	Darati Police Station Dist. Yavatmal
Aagosh K. Karhale	Ph. D. Programme in the Department of Biochemistry	Indian Institute of Science Bengaluru, Karnataka
Narayan S. Shitre	Ph. D. (Research Program Organic Chemistry)	Indian Institute of Science Bengaluru, Karnataka
Vaishali B. Mahajan	Assistant Director Group A	Regional Forensic Science Laboratory, Nagpur
Sharwari S. Kulkarni	Assistant Director Group A	Govt. Regional Forensic Science Lab. Amravati
Ramprasad T. Mundhe	Assistant (Accounts & financial Professional)	The New India Assurance Company Limited , Mumbai
Dr. Anvita D. Mangte	Assistant Professor	P.M. Patel Institute of P.G. Studies & Research in Science, Anand
Dr. Aashish G. Sarap	Assistant Professor	Shri R.L.T. College of Science, Akola
Dr. Pawan J. Tambde	Associate Professor	Department of Chemistry, ASC College, Nandgaon, Nasik
Dr. Madhukar G. Dhonde	Associate Professor	Mohata Science College, Nagpur
Dr. Prashant R. Mahalle	Assistant Professor & Head	Late. B. S. Arts, Prof. N. G. Science and A. G. Commerce College, Sakharkherda
Dr. Nilesh Tale	Assistant Professor	Late. B. S. Arts, Prof. N. G. Science and A. G. Commerce College, Sakharkherda
Vishnu Khond	Chemist-Synthesis R & D	UPL Limited, UPL House, Bandra (East Mumbai)
Yogesh G. Tanapure	Chemist-Synthesis R & D,	UPL Limited, UPL House, Bandra (East Mumbai)
Shruti A. Kale	Trainee -Chemistry information	Sci. Edge Abstract, Erandwane, Pune
Shrikant B. Nikam	UGC-Senior Research Fellow	CSIR-National Chemical Laboratory, Pune
Aditi S. Nagwanshi	Jr. Chemist	Micro Labs Ltd, Bangalore, Karnataka
Rajdeep Y. Taley	Jr. Chemist	MSEB, Matunga Mumbai
Swapnil V. Wagh	Jr. Office Assistant at B-3 level	Mumbai, Govt of India Mint, Mumbai
Eshwarkumar R. Puniya	Manufacturing Associate	CORNING Tech. India Pvt. Ltd., Pune
Mohammad Tanveer	Research Fellow	CSIR institute of Chemical Technology, Hyderabad
Mahesh G. Zamare	Constable	Central Armed Police Force, Assam
Vishal A. Patil	Stipendiary Trainee	Category-II Lab. BARC, Mumbai

22. Features of Department

1. Affiliated to Sant Gadge Baba Amravati University.
2. One of the earliest departments in university, established in 1967.

3. Considering faculty members, biggest department in Sant Gadge Baba Amravati University affiliated colleges.
4. Highly qualified teaching staff with most of the faculty members acquiring NET/SET and Ph.D.
5. Higher number of recognized Ph.D. and M. Phil. supervisors.
6. Large number of students completed or registered for Ph.D. and M. Phil course at department.
7. Separate practical labs for M.Sc. Ist year and M.Sc. IInd year students.
8. Research lab facility with all necessary equipment for Ph.D., M.Phil. and M.Sc. students.
9. Central Instrumentation Cell facility with availability of sophisticated instruments like HPLC, XRD, IR, UV-visible Spectrophotometer, etc.
10. More than 270 reference title books available in departmental library.
11. More than 250 research articles have been published in National /International journals.
12. More than 400 research papers have been presented in National /International Conferences / Seminars / Symposia / Workshops.
13. Received large funds from the University Grants Commission (UGC) and various other government funding agencies through minor and major research projects.
14. Research collaborations with the premium research institutes in India like National Chemical Laboratory (NCL) Pune, Institute of Chemical Technology (ICT) Mumbai, C.D.R.I. Lucknow and I.I.T. Hyderabad.
15. Consistent excellent academic results in University - The department holds glorious track record that includes University toppers in chemistry.
16. Alumni of the Department are holding key positions in the Laboratories Industries viz. DRDO, N.C.L. Pune, Forensic Laboratories, IITs, IISCs, I.C.T. Mumbai, Reliance, Reddy's Laboratory, Ranbaxy, Cipla, Lupin, Duphar and academic institutions.
17. Healthy and interactive atmosphere for learning.


Glimpses of Department


International Ozone Day



Page No. 2

Poster Competition


Shri Shivaji Education Society's
Shri Shivaji College of Arts, Commerce & Science, Akola (MS)
 Reaccredited by NAAC with "A" Grade with CGPA of 3.24*
 Awarded CPE status (College with potential for excellence, lead college status by SGBAU)




PG Department of Chemistry
Organizing
Online State Level Poster Competition for MSc.II (Chemistry)
 On
World Ozone Day -16 Sept.2021
Theme - Montreal Protocol-'keeping us, our food and vaccine cool'.

Dr. R. M. Bhise **Dr. K. N. Puri**
Principal *Professor & Head*
 Shri Shivaji College Akola Department of Chemistry

WORLD OZONE DAY

September
16



 Ozone

PG Department of Chemistry,
 Shri Shivaji College of Arts, Commerce & Science Akola.

Theme - Montreal Protocol-'keeping us, our food and vaccine cool'.

Prize	
First (1 st)	1000/-
Second (2 nd)	700/-
Third (3 rd)	500/-

Prizes:-



E-certificate will be provided to all participant via e-mail.

With Regards: Organizing Committee-

Dr. D. S. Deshmukh

Assistant Professor

 8275418969

Miss. K.V.Kumbhalkar

Assistant Professor

 8275865321

Mr. Zamir Shekh

Assistant Professor

 9175272315

PG Department of Chemistry
 Shri Shivaji College of Arts, Commerce & Science Akola.

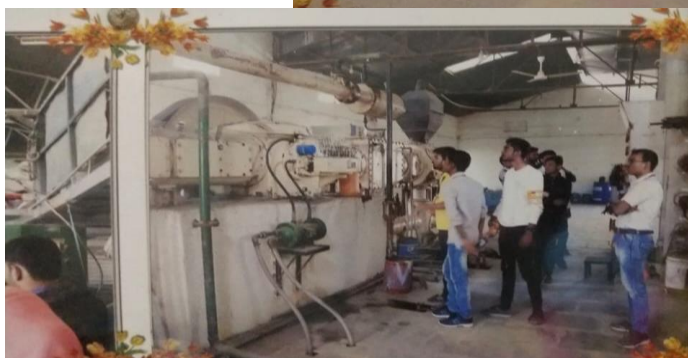


Group Discussion

Visit to Research Institution [CSIR IICT Hyderabad]



Industrial Visit Maharashtra Industrial Development Corporation Akola.



Industrial Visit Excursion Tour Amul Industry Anand Gujarat





Guest Lecture Delivered by Kulkarni sir



Guest Lecture Delivered by Dr. P. R. Mandlik



Guest Lecture Delivered by Dr. Marathe sir



Technical Supporting Staff of Chemistry Department