

SHRI SHIVAJI ARTS, COMMERCE AND SCIENCE COLLEGE, AKOT

DEPARTMENT OF BOTANY

1. Faculties: Faculty profile

Name of the Faculty	Designation	Qualification
Dr. Manik M. Dhore	Associate Professor and Head	M.Sc.M.phil.Ph.D.
Dr. Santosh N. Patole	Assistant Professor	M.Sc.Ph.D.
Ku. Ashwini B.Phokmare	Assistant Professor	M.Sc.NET
Ku. Nutanvarsha P.Deshmukh	Assistant Professor	M.Sc.Ph.D.
Mr. Bharat P.Nagare	Assistant Professor	M.Sc.NET,SET
Transfer Faculty		
Dr.Ravindra S.Dhande	Assistant Professor	M.Sc.Ph.D.,NET,SET

Non teaching faculty

Sr.No.	Name	Designation
1	L.B. Sanap	Laboratory Assistant
2	Mr. S.N. Pundkar	Laboratory Attendant
3	Mr. P.S. Padole	Laboratory Attendant

2. Programme and its outcomes

Programmes offered

	Programme
UG	B.Sc.
Research	Ph.D.
COP	Certificate Course in Biotechnology
Value added courses	1. Floriculture (2017-18) 2. Mushroom cultivation (2018-19)

Programme outcomes

B.Sc.

1. Knowledge and understanding about plant diversity.
2. Practical skills in the field and laboratory experiments.
3. Presentation skills in life sciences.
4. Scientific knowledge in life sciences and fundamental metabolism of plants.
5. Knowledge about biodiversity exploration and conservation.

Certificate course in biotechnology

1. Basic Theoretical and practical training in concepts and instrumentation of biotechnology.
2. Understanding of applications of biotechnology.

Results:

2013-14

S.N .	Name of Teacher	Class	Semester	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole+Dr. R.S.Dhande	B.Sc.I	I	102	51	50%
2.	Dr.M.M.Dhore+Dr.S.N.Patole+ Mr. R.S. Dhande		II	97	82	84.58%
3.	Dr.M.M.Dhore+Dr.S.N.Patole+Ku. U.S. Raut	B.Sc.II	III	92	52	56.52%
4.	Dr.M.M.Dhore+Dr.S.N.Patole+ Ku.U.S. Raut		IV	89	63	70.78%
5.	Dr.R.S.Dhande+M.S.Mahalkar Ku. S.S. Belokar	B.Sc.III	V	46	42	91.30%
6.	Dr.R.S.Dhande+M.S.Mahalkar Ku. S.S. Belokar		VI	46	44	95.64%

2014-15

S.N.	Name of Teacher	Class	Semester	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole R.S.Dhande +U.S.Raut	B.Sc.I	I	116	74	63.79%
2.	Dr.M.M.Dhore+Dr.S.N.Patole U.S.Raut + D.M.Lulla		II	105	92	87.61%
3.	Dr.M.M.Dhore+Dr.S.N.Patole R.S.Dhande + Ku.J.S.Dod	B.ScII	III	96	60	62.50%
4.	Dr.M.M.Dhore+Dr.S.N.Patole R.S.Dhande + Ku.J.S.Dod		IV	93	78	83.87%
5.	R.S.Dhande +M.S.Mahalkar+ R.H.Deshmukh +D.M.Lulla	B.Sc.III	V	77	58	75.32%
6.	R.S.Dhande +M.S.Mahalkar+ R.H.Deshmukh		VI	80	68	85%

2015-16

S.N	Name of Teacher	Class	Semester	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole+Dr. R.S.Dhande+Ku.U.S.Raut	B.Sc.I	I	134	79	58.95%
2.	Dr.M.M.Dhore+Dr.S.N.Patole+ Ku.U.S.Raut		II	127	108	85.3%
3.	Dr.M.M.Dhore+Dr.S.N.Patole+Dr. R.S.Dhande+Ku.J.S.Dod	B.Sc.II	III	95	57	60%
4.	Dr.M.M.Dhore+Dr.S.N.Patole+ Dr.R.S.Dhande		IV	92	51	55.43%
5.	Dr.R.S.Dhande+M.S.Mahalkar R.H.Deshmkh+D.M.Lulla	B.Sc.III	V	89	54	60.67%
6.	Dr.R.S.Dhande+R.H.Deshmukh+ D.M.Lulla		VI	88	71	80%

2016-17

S.N.	Name of Teacher	Class	Semester	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole+Dr. R.S.Dhande+Ku.U.S.Raut	B.Sc.I	I	127	85	66.92 %
2.	Dr.M.M.Dhore+Dr.S.N.Patole+ Ku.D.A.Pimprale		II	115	79	68.69 %
3.	Dr.M.M.Dhore+Dr.S.N.Patole+Dr. R.S.Dhande	B.Sc.II	III	111	79	71.17 %
4.	Dr.M.M.Dhore+Dr.S.N.Patole+ Dr.R.S.Dhande+Mr. K.B.Pachade		IV	111	71	63.96 %
5.	Dr.R.S.Dhande+ Ku.A.B.Phokmare Ku.R.H.Deshmukh	B.Sc.III	V	70	66	94.28 %
6.	Dr.R.S.Dhande+R.H.Deshmukh+ Ku.A.B.Phokmare		VI	72	49	68.05 %

2017-18

S. N.	Name of Teacher	Class	Sem.	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole+ Dr. R.S.Dhande	B.Sc.I	I	156	96	61.53 %
2.	Dr.M.M.Dhore+Dr.S.N.Patole		II	144	122	84.72 %
3.	Dr.M.M.Dhore+Dr.S.N.Patole+ Dr.R.S. Dhande	B.Sc.II	III	98	72	73.46 %
4.	Dr.M.M.Dhore+Dr.S.N.Patole Dr.R.S.Dhande+Mr. K.B.Pachade		IV	98	79	80.61 %
5.	Dr.R.S.Dhande+ Ku.U.S.Raut Ku.R.H.Deshmukh	B.Sc.III	V	90	71	78.89 %
6.	Dr.R.S.Dhande+R.H.Deshmukh Ku.U.S.Raut		VI	89	81	90.10 %

2018-19

S. N.	Name of Teacher	Class	Semester	Appeared Students	Passed Students	Subject Result
1.	Dr.M.M.Dhore+Dr.S.N.Patole+Ku. U.S.Raut+J.R.Khanderao	B.Sc.I	I	145	106	73.10%
2.	Dr.M.M.Dhore+Dr.S.N.Patole Ku.U.S.Raut Ku.J.R.Khanderao		II	135	113	83.70 %
3.	Dr.M.M.Dhore+Dr.S.N.Patole+Mr. K.B. Pachade	B.Sc.II	III	125	88	70.4%
4.	Dr.M.M.Dhore+Dr.S.N.Patole+Mr. K.B. K.B.Pachade		IV	120	96	80 %

5.	Dr.M.M.Dhore+ Dr.S.N.Patole +Ku.A.B.Phokmare Ku.R.H. Deshmukh +Ku.D.A. Pimparale	B.Sc.II I	V	96	76	79.17%
6.	Ku.R.H.Deshmukh+ Ku.A.B. Phokmare +Ku.D.A.Pimparale		VI	93	67	72.04%

ICT lectures

2013-14

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.I Sem I	09.07.2013	General Characters and Life Cycle of Bryophyta	Powerpoint Presentation on LCD Projector
2	B.Sc.III Sem.V	20.09.1013	Atmosphere and its gases composition	Powerpoint Presentation on LCD Projector
3	B.Sc.III sem. V	04.10.2013	Soil profile	Powerpoint Presentation on LCD Projector
4	B.Sc.II Sem. III	15.10.2013	Botanical gardens	Powerpoint Presentation on LCD Projector
5	B.Sc. I sem. I	16.10.2013	Types of Stele in Pteridophytes	Powerpoint Presentation on LCD Projector
6	B.Sc.II Sem. IV	04.02.2014	Chloroplast structure	Powerpoint Presentation on LCD Projector
7	B.Sc.I Sem. II	05.04.2014	Geological time Scale and Fossils	Powerpoint Presentation on LCD Projector
8	B.Sc. I Sem. II	07.04.2014	Pollination and its types	Powerpoint Presentation on LCD Projector

2014-15

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.II Sem III	09.09.2014	Botanical nomenclature	Powerpoint Presentation on LCD Projector
2	B.Sc.ISem.II	10.02.1014	Types of fossils	Powerpoint Presentation on LCD Projector

2015-16

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.II sem. III	19.09.2015	Bentham & Hooker's system of classification	Powerpoint Presentation on LCD Projector
2	B.Sc. IIISem. V	22.09.2015	Photosynthesis	Powerpoint Presentation on LCD Projector

2016-17

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.I Sem I	18.08.2016	General Characters and Life Cycle of Bryophyta	Powerpoint Presentation on LCD Projector
2	B.Sc.III Sem.V	25.08.2016	Atmosphere and its gases composition	Powerpoint Presentation on LCD Projector
3	B.Sc.III sem. V	13.09.216	Soil profile	Powerpoint Presentation on LCD Projector
4	B.Sc.II Sem. III	22.09.2016	Bentham & Hooker's system of classification	Powerpoint Presentation on LCD Projector

2017-18

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.I Sem I	09.08.2017	General Characters and Life Cycle of Bryophyta	Powerpoint Presentation on LCD Projector
2	B.Sc.III Sem.V	12.09.2017	Atmosphere and its gases composition	Powerpoint Presentation on LCD Projector
3	B.Sc.III sem. V	20.09.2017	Soil profile	Powerpoint Presentation on LCD Projector

2018-19

S.N.	Class	Date	Topic	ICT tool used
1	B.Sc.I Sem I	10.09.2019	Mushroom cultivation techniques	Youtube video
2	B.Sc.III Sem.V	14.09.2018	Atmosphere and its gases composition	Powerpoint Presentation on LCD Projector
3	B.Sc.III sem. V	20.09.2018	Respiration	Powerpoint Presentation on LCD Projector
4	B.Sc.II Sem. III	07.09.2018	Biodiversity: Concept and Importance	Powerpoint Presentation on LCD Projector

3. Awards and Achievements:**Students Achievements**

Year	Name of the Student	Awards/Achievement
2015-16	Ku. Seema Takalkar	6 th Merit in B.Sc. examination, SGB Amravati University, Amravati
2016-17	Ku. Poonam Mahale	3 rd Merit in B.Sc. examination, SGB Amravati University, Amravati
	Mr.Nitin B.Wahurwagh	8 th merit in B.Sc. examination, SGB Amravati University,Amravati
2017-18	Ku.Namrata Raibole	6 th merit in B.Sc .examination, SGB Amravati University, Amravati
2018-19	Ku. Nikita Akotkar	5 th merit in B.Sc. examination, SGB Amravati University, Amravati
2017-18	Ku.Shyamal N.Bhave	Second prize in Intercollegiate Poster competition held at R.G.Rathod Arts ,Commerce and Science College, Murtizapur

Faculty Achievements

Year	Name of the Faculty	Awards/Achievements
2016-17	Dr. R.S. Dhande	Ph.D. degree awarded by Sant Gadge Baba Amravati University, Amravati
2017-18	Dr. R.S. Dhande	Young Scientist Award at International Conference Organized by Shri Shivaji Science College, Nagpur
		Best Paper Presentation Award at State Level Conference Organized by Shri Shivaji Arts, Commerce and Science College, Akola
2018-19	Dr. S.N. Patole	Recognised as Ph.D. supervisor

4. Research

Papers Published in Journals:

Title of Paper	Name of the author/s	Department of the teacher	Name of Journal	Year of publication	ISSN/ ISBN number
Phenological study of some tree species of Yavatmal district M.S.	Dr.Ku.M.M. Dhore	Botany	International Journal, Multilogic in Science	January 2013	2277-7601
Multifarious uses of plants of Akot region M.S.	Dr.S.N.Patole	Botany	International journal of life Sciences Leaflet	1 st February 2014	2277-4297
Ethnobotanical plants used for curing skin diseases by Tribal people from Ambabarva sanctuary M.S.	Dr.S.N.Patole	Botany	International journal of life Sciences Leaflet	1 st June 2014	2277-4297
Biodiversity of tree plants of Narnala wildlife sanctuary, Maharashtra	Dr.S. N.Patole	Botany	International journal of life sciences Leaflet	1 st May 2015	2277-4297
Medicinal plants of Akot Tahsil used for the treatment of kidney disorders	Dr.S.N.Patole	Botany	International journal of Innovative science and research	July 2015	
Studies on aquatic plants of perennial lakes of Narnala wildlife sanctuary, Akola District M.S.	Dr.S.N.Patole	Botany	Researchers in Biosciences Agriculture and Biotechnology	November 2015	2347-517x
Vascular Plant diversity of Wan sanctuary	Dr.S.N.Patole, Dr.M.M.Dhore	Botany	Botanique	2015	0257-800x
Studies on water hyacinth of Chandrabhaga river and its ecological and sociological impacts	Dr.S.N.Patole, R.S.Dhande	Botany	Vidyabharti International Interdisciplinary Research Journal	12 th March 2016	2319-4979
Studies on fungi associated with spoilage of fruits, grains and vegetables of selected plants	R.S.Dhande, S.N.Patole	Botany	Researchers in Biosciences Agriculture and Biotechnology	January 2017	2347-517x
Studies on physicochemical properties drinking water of Akola city	Dr.S.N.Patole, Dr.M.M.Dhore	Botany	International journal of research in Bioscience, Agriculture and Biotechnology	July 2017	2347-517x
Amino acids and sugars from floral nectars of some local plants	Dr.M.M.Dhore	Botany	Indo Asian Philosopher	April 2017- Sept 2017	2348-5825
Isolation and		Botany	International	July 2017	2347-

characterization of protease inhibitors from alkalophilic bacteria isolated from Lonar crater and its insecticidal producing ability	Dr.R.S.Dhande		journal of research in Bioscience, Agriculture and Biotechnology		517x
Isolation of alkalophilic bacteria from Lonar craters and its insecticidal proteins producing ability	Dr.R.S.Dhande	Botany	International Journal of scientific progress and research	2017	2349-4689
Studies on biodiversity of common weeds and its medicinal value of Akot region Maharashtra, India	Dr.S.N.Patole	Botany	Ajanta	March 2019	2277-5730

Books Published: Chapters in Book

Name of the Author	Title of the book	Year	Publisher	ISBN
Mr. R.S. Dhande	Diversity of Microbes and Cryptogams B.Sc. I Sem I	2013-14	Nabh Prakashan, Amravati	
Mr. R.S. Dhande	Molecular Biology and Biotechnology B.Sc. III Sem VI	2013-14	Nabh Prakashan, Amravati	
Dr. M.M. Dhore	A Textbook of Practical Botany B.Sc. I Sem I&II	2016-17	Nabh Prakashan, Amravati	

Conference Attended by Faculties

S.N.	Name of Teacher	Title of the Conference	State/National/International	Date
1	Mr. R.S. Dhande	The role of Internal Quality Assurance cell for the Sustenance and enhancement of quality in higher education organized by Shri Shivaji College of Arts, Commerce & Science College, Akola	State	8 Sept. 2013
2	Dr. S.N. Patole	Environmental Impact and organism response organized by Dr. R.G. Rathod Arts and Science College, Murtizapur	National	27-28 Sept. 2013
3	Mr. R.S. Dhande	Environmental Impact and organism response organized by Dr. R.G. Rathod Arts and Science College, Murtizapur	National	27-28 Sept. 2013
4	Dr. S.N. Patole	Recent advances in plant taxonomy research	National	27-29, Dec. 2013

		organized by P.G. Dept. of Botany, RTM, Nagpur		
5	Dr. M.M. Dhore	Recent Trends in Material Preparation and Characterization organized by Dept. Chemistry and Physics, Shri Shivaji Arts, Commerce & Science College, Akot	National	24 Feb. 2014
6	Dr. S.N. Patole	Recent Trends in Material Preparation and Characterization organized by Dept. Chemistry and Physics, Shri Shivaji Arts, Commerce & Science College, Akot	National	24 Feb. 2014
7	Dr. R.S. Dhande	Recent Trends in Material Preparation and Characterization organized by Dept. Chemistry and Physics, Shri Shivaji Arts, Commerce & Science College, Akot	National	24 Feb. 2014
8	Dr. M.M. Dhore	Aspects and Appraisal in Plant Sciences organized by Late Pundlikrao Gawali Arts and Science Mahavidyalaya, Shirpur (Jain)	National	15 March, 2015
9	Dr. S.N. Patole	Aspects and Appraisal in Plant Sciences organized by Late Pundlikrao Gawali Arts and Science Mahavidyalaya, Shirpur (Jain)	National	15 March, 2015
10	Dr. S.N. Patole	Research and Conservation of Biological Resources and Biological Diversity Act 2002 organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	State	22 Jan, 2016
11	Dr. R.S. Dhande	Research and Conservation of Biological Resources and Biological Diversity Act 2002 organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	State	22 Jan, 2016
12	Dr. M.M.Dhore	Innovations in Agri-	National	26-27 Feb,

		biosciences organized by Dr. Ambedkar College, Nagpur		2016
13	Dr. S.N. Patole	Innovations in Agri-biosciences organized by Dr. Ambedkar College, Nagpur	National	26-27 Feb, 2016
14	Dr. R.S. Dhande	Innovations in Agri-biosciences organized by Dr. Ambedkar College, Nagpur	National	26-27 Feb, 2016
15	Dr. M.M. Dhore	Advances and Innovations in Plant Sciences organized by Dept. of Botany, GVISH, Amravati	National	29 Feb-1 March, 2016
16	Dr. R.S. Dhande	National Workshop on Scientific/Research Paper writing organized by Dept of Chemistry, SGBAU, Amravati	National	4-5 March, 2016
17	Dr. S.N. Patole	Recent Trends in Conservation of Biodiversity organized by SSKR Innani Mahavidyalaya, Karanja Lad	National	12 th March, 2016
18	Dr. R.S. Dhande	Recent Trends in Conservation of Biodiversity organized by SSKR Innani Mahavidyalaya, Karanja Lad	National	12 th March, 2016
19	Dr. S.N. Patole	6 th International Science Congress organized by Hutatma Rajguru Collge, Pune	International	8-9 Dec, 2016
20	Dr. M.M. Dhore	Plant diversity: Past and Present organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	National	30-31 Dec. 2016
21	Dr. S.N. Patole	Plant diversity: Past and Present organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	National	30-31 Dec. 2016
22	Dr. M.M. Dhore	Recent trends in Science and Technology, Sustainable development through Scientific Approach organized by Science College, Nagpur	International	12-14 th July, 2017
23	Dr. S.N. Patole	Recent trends in Science and Technology,	International	12-14 th July, 2017

		Sustainable development through Scientific Approach organized by Science College, Nagpur		
24	Dr. R.S. Dhande	Recent trends in Science and Technology, Sustainable development through Scientific Approach organized by Science College, Nagpur	International	12-14 th July, 2017
25	Dr. S.N. Patole	Recent Trends in Biotechnology and Biodiversity organized by Shivaji Science College, Amravati	National	22-23 Sept, 2017
26	Dr. R.S. Dhande	Recent Trends in Biotechnology and Biodiversity organized by Shivaji Science College, Amravati	National	22-23 Sept, 2017
27	Dr. S.N. Patole	Emerging perspective in Parasitology Research organised by Yashwantrao Chavhan College, Sillod, Dist. Aurangabad	National	20-21 Jan, 2017
728	Dr. R.S. Dhande	Emerging perspective in Parasitology Research organised by Yashwantrao Chavhan College, Sillod, Dist. Aurangabad	National	20-21 Jan, 2017
29	Dr. Dr. M.M. Dhore	Aerobiology-2018 organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	National	29-31 Jan, 2018
30	Dr. S.N. Patole	Aerobiology-2018 organized by Dept. of Botany, Sant Gadge Baba Amravati University, Amravati	National	29-31 Jan, 2018
31	Dr. M.M. Dhore	Recent advances and opportunities in Biological Sciences organized by Late Pundlikrao Gawali Arts and Science Mahavidyalaya, Shirpur (Jain)	National	17 March, 2017
32	Dr. S.N. Patole	Recent advances and opportunities in Biological Sciences organized by Late Pundlikrao Gawali Arts	National	17 March, 2017

		and Science Mahavidyalaya, Shirpur (Jain)		
33	Dr. R.S. Dhande	Recent advances and opportunities in Biological Sciences organized by Late Pundlikrao Gawali Arts and Science Mahavidyalaya, Shirpur (Jain)	National	17 March,2017
34	Dr. M.M. Dhore	Current Scenario of Botanical Research organized by Shri Shivaji College of Arts, Commerce and Science, Akola	State	2 nd Feb, 2018
35	Dr. S.N. Patole	Current Scenario of Botanical Research organized by Shri Shivaji College of Arts, Commerce and Science, Akola	State	2 nd Feb, 2018
36	Dr. R.S. Dhande	Current Scenario of Botanical Research organized by Shri Shivaji College of Arts, Commerce and Science, Akola	State	2 nd Feb, 2018
37	Dr. M.M. Dhore	Scope of Botany, beyond the phylogeny, Characterization to application oriented research organized by Mahatma Fule Mahavidyalaya, Warud	National	8-9 Feb, 2019
38	Dr. M.M. Dhore	Recent advances in Science and Technology organized by Gopikabai Sitaram Gawande Mahavidyalaya, Umarkhed.	National	5-6 th March,2019

Orientation/Refresher Course/ Short term Courses:

S.N.	Name of Faculty	Name of the Course	Date	University
1	Dr. S.N. Patole	Special Winter School on “Innovation Teaching and Research” (Equivalent to Refresher Course)	05.03.2018 to 25.3.2018	HRDC, Pt. Ravishankar Shukla University, Raipur, Chattisgarh.
2	Dr. S.N. Patole	Short Term Course on “Gender Sensitization”	21.05.2018 to 26.05.2018	UGC-HRDC, Rani Durgavati Vishwavidyalaya, Jabalpur, M.P.
3	Dr.R.S.Dhande			

5. Infrastructure and facilities

UG Laboratory	277 Sq.m.
Botanical Garden	344 Sq.m.

Major equipments

Sr. No	Equipments	
1.	Mini Centrifuge	01
2.	Laminar Airflow	01
3.	Electrophoresis Unit	01
4.	Binocular Research Microscope	02
5	Trinocular Stereoscope Microscope	01
6.	Binocular Microscope with Camera	01
7.	Hot Air Oven	01
8.	Autoclave	01
9.	Inoculating Chamber	01
10.	Digital Balance	01
11.	Distillation Assembly	01
12.	Soxhlet Apparatus	01
13	Sugar Refractometer	01
14.	LCD Projector	01
15.	Refrigerator	01
16.	Herbarium Cabinet	01
17	Computer with internet connectivity	01
18	Printer	01

Departmental Library

Books	80 titles
Other learning resources	PowerPoint presentations, Video lectures

6 Extension activities

Year	Extension Activity
2013-14	Tree Plantation (15/08/2013)
	Seed Collection from College Campus and nearby area
2014-15	Tree Plantation (19/09/2014)
	Seminar on Cultivation of Pomegranate Crop for Farmers (05/10/2014)
	Seed Collection from College Campus and nearby area (Month September and February)
	International Women's Day
2015-16	Tree Plantation (19/08/2015)
	Checklist of Flora of the College Campus
	International Women's Day
2016-17	Tree Plantation (15/08/2016)
	Guided Students of Shri.Shivaji Science College, Amravati for Taxonomic Identification of Plants in the Botanical Excursion (27/08/ 2016)
	International Women's Day
2017-18	Guidance to the Forest Department Staff Regarding the Palatable and Non-Palatable Plants and Identification of Plants (4/10/2017)
2018-19	Tree Plantation (12.08.18)
	Guidance Regarding the Practical Skills in Botany to the Students of Local School Aski Kids.
	International Women's Day

7.Students Participation in Co-curricular Activities:

S.N.	Name of Participant	Activity	Organizing College	Year
1	Mr.Nagesh R.Nahate	Workshop on "Hands on Training in Tissue Culture"	Shri.Shivaji Arts and Science College, Chikhali	2014
2	Mr.Bharat P.Nagare	Workshop on "Hands on Training in Tissue Culture"	Shri.Shivaji Arts and Science College, Chikhali	2014
3	Ku.Punam Mahale	State Level Seminar	J.B.Science College, Wardha	27 th Feb.2015
4	Ku.Pranjali B.Bhagat	Avishkar Research Festival	Shri.Shivaji College of Arts, Commerce and Science, Akola	19 th Oct.2015
5	Ku.Alka Puri	Avishkar Research Festival	Shri.Shivaji College of Arts, Commerce and Science, Akola	19 th Oct.2015
6	Ku. Poonam Mahale	Poster Competition on "Environment"	Jagdamba Mahavidyalaya, Achalpur	3 rd February 2016
7	Ku. Akansha Pinjarkar	Intercollegiate Seminar	Dr.R.G.Rathod Arts and Science College,	19 th February2018

		Competition	Murtizapur	
8	Ku.Shyamal N.Bhave	Intercollegiate Poster Competition	Dr.R.G.Rathod Arts and Science College, Murtizapur	19 th February 2018
9	Ku. Monali Rande	Interuniversity Poster Competition	Shri.Shivaji College of Arts, Commerce and Science, Akola	5 th February 2019
10	Ku. Shyamal Bhave	Training on “Scope of Botany Beyond the Phylogeny, Characterization to Application Oriented Research”	Mahatma Fule Mahavidyalaya, Warud	8 th and 9 th February 2019
11	Ku.Aishwarya Dhule	Training on “Scope of Botany Beyond the Phylogeny, Characterization to Application Oriented Research”	Mahatma Fule Mahavidyalaya, Warud	8 th and 9 th February 2019

8. Innovative practices

- Tree Plantation Audit of the College Campus.

9. Seminars/Conferences/Workshops organised

- One day workshop on “Mushroom Cultivation Techniques” organised by Department on 12th March 2019.

10.Academic Activities

Guest Lectures

Year	Guest Speaker	Date	Topic
2013-14	Mr. Umesh Verma Deputy Conservator of Forest, Akot Wildlife Division, Akot	29 th July 2013	Tiger Conservation
	Mr. Tushar Wankhade, Assistant Professor, Department of Botany, Shri Shivaji Science College, Amravati	1 st February 2014	Biodiversity Conservation
2014-15	Dr. D.S. Talwankar, Assistant Professor, Department of Botany, G.S. College, Khamgaon	07 th August 2014	Beauty of the past
2015-16	Dr. P.S. Kokate Associate Professor, Department of Botany, Shri Shivaji Arts, Commerce, Science College, Akola	30 th January 2016	Introduction to Paleobotany
	Mr. Mangesh Mohril Scientist, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola	16 th February 2016	Basic concepts in Biotechnology

2016-17	Dr. S.P. Rothe, Professor Department of Botany, Shri Shivaji Arts, Commerce and Science, College, Akola	4 th September 2016	Medicinal plants and their importance
	Dr. S.N. Ingole Associate Professor, Department of Botany, Bar.RDIK College, Badnera	25 th January 2017	Plants and Environment
2017-18	Dr. D.K. Koche Department of Botany Shri Shivaji Arts, Commerce and Science, College, Akola	3 rd August 2017	Origin and Evolution of plants
	Dr.D.V. Hande Associate Professor, Department of Botany, Shri Shivaji Science College, Amravati	12 th August 2017	Basic and Applied Mycology
2018-19	Mr. Shilanand Hiwarale HISTA, Amravati	September 2018	Embryology of Angiosperms
	Mr. M.B. Bobade Assistant Professor, Department of Botany, Mahatma Phule Mahavidyalaya, Warud	27 th March 2019	Paleobotany (Fossils)

Competitions organised for Students:

S.N.	Activity	Topic	Date
1	Poster Competition	Environment	19 th January 2016
2	Poster Competition	Conservation of Biodiversity and Natural Resources	28 th January 2017
3	Poster Competition	Environment and Biodiversity	20 th January 2018
4	Essay Competition	My Solutions to Environmental Problems	21 st March 2018
5	Poster Competition	Protection of Ozone Layer and Climate	19 th September 2018
6	Essay Competition	Importance of Forest	25 th March 2019

Extension Activities

Seed Collection

From

College Campus and nearby area

Department of Botany carried out the activity of seed collection in the month of October 2013. The seeds, fruits and seedlings were collected from the college campus, nearby forest areas, roadsides and agricultural fields by the students and faculty members. These plant saplings were documented. The collected seeds, fruits were stored in the botany laboratory. These stored seeds planted in the botanical garden, distributed to students and dispersed in forest area and roadside. All the students of B.sc.II took part in this seed collection activity. The seeds and seedlings of the following plants were collected by the students.

1. Seeds of *Azadirachta indica*
2. Seedlings of *Azadirachta indica*
3. Fruits of *Melia Azadirach*
4. Seeds of *Polyalthea longifolia*
5. Seedlings of *Terminalia arjuna*
6. Seeds of *Abrus precatorius*
7. Seedlings of *Murraya koenigi*
8. Fruits of *Terminalia cattapa*
9. Seedlings of *Jatropha gossypifolia*
10. Seedlings of *Ficus benghalensis*
11. Seeds of *Withania somnifera*
12. Seeds of *Syzygium cumini*
13. Seeds of *Tamarindus indica*
14. Seedlings of *Ocimum sanctum*



B.Sc.II students documented the plant saplings



B.Sc.II students documented the plant saplings

Tree Plantation Programme

Department of Botany organised Tree Plantation programme on 19th September 2014 in college campus of Shri.Shivaji Arts, Commerce and Science College, Akot under the guidance of Hon. Principal Dr.A.L.Kulat .The objective for tree plantation is for awareness about environment safety and nourishment of campus. Twenty five students and six faculty members involved in this activity. On this occasion, Principal Dr.A.L.Kulat mentioned that it is need of the hour to plant trees; people should develop the habit of planting trees and conserve the planted saplings. Dr.M.M.Dhore, Head ,Department of Botany said plants are the foremost source for producing the oxygen in environment, they helps to reduce the level of CO₂.In all 25 saplings had been planted namely *Delonix regia*,*Pongamia pinnata*,*Bauhinia*,*Azadirachta indica*,*Cassia species*, *Adhatoda vasica*,etc.



Hon.Principal Dr.A.L.Kulat planting the plant saplings



B.Sc.I students planting the plant saplings

Seminar on Cultivation of Pomegranate Crop for Farmers

The seminar on “Cultivation of Pomegranate Crop” was organized by Department of Botany in collaboration with Indian Farmers Fertilizers Company Ltd. (IFFCO), Akola. The seminar was arranged for farmers in Akot region. The objective of this workshop was to know farmers for enhancing crop productivity through modern techniques and in depth practical knowledge. The seminar was held on 5th Oct.2014 at NRSC hall of Shri.Shivaji Arts, Commerce and Science College, Akot. The seminar was inaugurated by the auspicious hands of Hon.Shri.Shailesh Hinge, Sub divisional Officer, Akot on 5th Oct.2014 at 10.00am in the valuable presence of President of seminar Hon.Dr.A.L.Kulat, Principal Shri.Shivaji Arts, Commerce and Science College ,Akot, Chief guest Hon.Dr.Vinay Supe,Expert,Pomegranate crop, Mahatma Fule krishi Vidyapeeth,Rahuri, ,Hon.Dr.Ramesh Nakat,Scientist Entomology Mahatma Fule krishi Vidyapeeth,Rahuri,Hon.Dr.Kiran Raghuvanshi,Scientist,Plant Pathology Mahatma Fule krishi Vidyapeeth,Rahuri,in presence of Hon.Shri.Satish Gadge, State MarketingManager,Mumbai,Hon.Shri.S.D.Warur,MarketingManager,Mumbai Hon.Shri.S.N.Londe, Main Divisional Manager IFFCO, Nagpur, Convenor, Dr.Ku.M.M.Dhore, Organizing secretary Dr.R.S.Dhande, Coordinator Dr.S.N.Patole and Farmers of Akot region. Hon.Shri.S.N.Londe has given Welcome speech and he outlined the importance of the seminar. He said that this is an opportunity for farmers of Akot region to put the problems related to Pomegranate crop.

The technical session began at 11.00 am. One twenty two farmers were participated in this seminar.Dr.Vinay Supe, Expert Pomegranate Crop, Mahatma Fule Krishi Vidyapeeth; Rahuri has given the first talk on cultivation and management of Pomegranate crop. He discussed on propagation, maintenance and harvesting of pomegranate. He also said Pomegranate is not economically profitable but also of great importance for human health. Dr.Ramesh Nakat, Scientist Entomology, Mahatma Fule Krishi Vidyapeeth, Rahuri delivered second talk and he discussed pests and major diseases affected by pomegranate fruit.

After lunch at 2.30 pm., In technical session II Dr.Kiran Raghuvanshi has given talk on control measures of diseases on Pomegranate fruit.

In Technical session III, discussion on various issues raised by farmers related to marketing, pests and diseases in pomegranate fruit.

To close of the seminar, the valedictory function was presided by the Hon.Principal, in presence of Dr.Vinay Supe, Dr.Ramesh Nakat, and Dr.Kiran Raghuvanshi as a chief guest of the function. Mr. Kotecha, Regional Manager, IFFCO, Akola proposed the vote of thanks.



Inaugural Function of Seminar on “Pomegranate Crop”



Dr.Vinay Supe delivering a lecture on Cultivation of Pomegranate Crop



Hon.Principal Dr.A.L.Kulat delivering presidential speech

Tree plantation Programme

On 19th August 2015 Department of Botany successfully completed the event of tree plantation at Botanical garden of Shri.Shivaji Arts, Commerce and Science College, Akot. The students of B.Sc.I Biology participated in the activity and planted the trees in the botanical garden and college premises. The purpose of tree plantation is to create awareness and spread the message of saving our planet, protecting our environment is the need of the hour. The importance of trees in contributing to the environment by providing oxygen, improving air quality was explained to the students on the occasion. The 22 students and three faculty members involved in this activity. Students planted as many as 35 plant saplings of flowering plants and medicinal plants in the Botanical garden.



Students of B.Sc.I planted the *Aloe vera* saplings



Students of B.Sc I planted the saplings

Shri Shivaji Arts, Commerce & Science College, Akot

DEPARTMENT OF BOTANY

Check list of plants of College Campus

2015-16

Report

From the very beginning of inception of human beings on the earth, man has relied on plants to fulfill his basic needs for his survival. Plants provide food, shelter and health. It is estimated that about ten million species of plants inhabit the planet earth of which, however only 1.7 million species are known to science. It is therefore the need of the hour to explore the floristic wealth of the earth so as to know what we have. The plant diversity however is under serious threat due to various anthropogenic factors and many plant species are disappearing. Many species are becoming extinct even before their discovery. This scenario necessitates the urgent need of conservation of this diversity. To formulate various strategies for this purpose, the first important step is to explore and inventories the flora. Keeping this perspective in view the present studies were conducted to explore and inventorize the plant species. Therefore an attempt has been made to study the plant species present in the campus. Different Morphological characters are being studied like habit, height, leaf, inflorescence, flowers, and fruits etc representing diversity of plants in the campus of Shri Shivaji Arts, Commerce & Science College, Akot. Floristic diversity can be defined as the variety and variability of plants in a given region. It refers to the number of types or taxa in a given region or group. Floristic diversity can be measured at any level from overall global diversity to ecosystem, community, species, populations, individuals and even to genes within a single individual. The checklist of plants attempts to highlight the diversity of vast plant resources of the college campus.

Check list of plant

1. *Boerhaavia diffusa* L.
Family- Nyctaginaceae
2. *Parthenium hysterophorus* L.
Family- Asteraceae
3. *Alternanthera sessilis* R.Br. ex DC.
Family-Amaranthaceae
4. *Gomphrena celosoides* Mart.
Family- Amaranthaceae
5. *Tribulus terrestris* L.
Family- Zygophyllaceae
6. *Cynodon dactylon* (L.) Pers
Family-Poaceae
7. *Tridax procumbens* L.
Family-Astreraceae
8. *Tragia hildbrandtii* Muell.
Family- Euphorbiaceae
9. *Calotropis gossypifolia* L.
Family- Asclepiadaceae
10. *Pentatropis capensis*
Family- Asclepiadaceae
11. *Hyptis suaveolens* (L.) Poit.
Family- Lamiaceae
12. *Indigofera cordifolia* Heyne ex Roth.
Family- Fabaceae
13. *Indigofera linifolia* (L.f) Retz.
Family- Fabaceae
14. *Euphorbia hirta* L.
Family- Euphorbiaceae
15. *Sida acuta* Burm f.
Family- Malvaceae

16. *Sida cordata* (Burm.f) Van Borssum
Family- Malvaceae
17. *Malvastrum coromandelianum* (L.) Gracke
Family- Malvaceae
18. *Acalypha indica*
Family- Euphorbiaceae
19. *Amaranthus viridis* L.
Family- Amaranthaceae
20. *Prosopis julifera* (Sw.) DC.
Family- Mimosaceae
21. *Butea monosperma* (Lam.) Taub.
Family- Papilionaceae
22. *Cassia tora* L.
Family- Caesalpiniaceae
23. *Alysicarpus vaginalis*
Family- Fabaceae
24. *Rhynchosia minima* (L.) DC.
Family- Fabaceae
25. *Clitorea ternatea* L.
Family- Fabaceae
26. *Tinospora cordifolia* (Willd.) Miersex.
Family- Menispermaceae
27. *Datura stramonium* Hook. F.
Family- Solanaceae
28. *Ailanthus exelsa*
Family- Simaroubaceae
29. *Zebranthus sp.*
Family- Liliaceae
30. *Oxalis corniculata*
Family- Oxalidaceae
31. *Cocculus hirsutus* (L.) Diels
Family- Menispermaceae

32. *Argemone mexicana* L.
Family- Papavaraceae
33. *Cleome viscosa* L.
Family- Cleomaceae
34. *Polygala arvensis* Willd.
Family- Polygalaceae
35. *Biophytum sensitivum* (L.) DC.
Family- Oxalidaceae
36. *Balanites aegyptica* (L.) Del.
Family- Simaroubaceae
37. *Tephrosia purpurea* (L.) Pers.
Family- Fabaceae
38. *Zornia gibbosa* Sponoghe
Family- Fabaceae
39. *Acacia leucophloea* (Roxb.) Willd.
Family- Mimosaceae
40. *Acacia nilotica* (L.) Delz.
Family- Mimosaceae
41. *Ageratum conyzoides* L.
42. Family- Asteraceae
43. *Blumea* sp.
Family- Asteraceae
44. *Eclipta prostrata* (L.) L. Mart.
Family- Asteraceae
45. *Launea procumbens* (Roxb.) Ramayya & Rajgopal
Family- Asteraceae
46. *Vernonia cinerea* (L.) Lees.
Family- Asteraceae
47. *Pergularia daemia* (Forsk.) Chiov.
Family- Asclepiadaceae
48. *Enicostema axillare* (Lamk.)A. Raynal
Family- Gentianaceae

49. *Evolvulus alsinoides* (L.) Sp.
Family – Convolvulaceae
50. *Merremia gangetica* (L.) Cuford.
Family – Convolvulaceae
51. *Physalis minima* L.
Family- Solanaceae
52. *Solanum nigrum* L.
Family- Solanaceae
53. *Kickxia ramosissima* (Wall.) Janchen
54. Family- Scrophulariaceae
55. *Verbascum chinense* (L.) Sant.
Family- Scrophulariaceae

Seed Collection from College Campus and nearby area

Department of Botany carried out the activity of seed collection in the month of September 2014 .The seeds, fruits and seedlings were collected from the college campus, nearby forest areas, roadsides and agricultural fields by the students and faculty members. These plant saplings were documented. The collected seeds, fruits were stored in the botany laboratory. These stored seeds planted in the botanical garden, distributed to students and dispersed in forest area and roadside. All the students of B.sc.II took part in this seed collection activity. The seeds and seedlings of the following plants were collected by the students.

1. Seeds of *Azadirachta indica*
2. Seedlings of *Azadirachta indica*
3. Fruits of *Melia Azadirach*
4. Seedlings of *Annona squamosa*
5. Seedlings of *Terminalia arjuna*
6. Seeds of *Abrus precatorius*
7. Seedlings of *Murraya koenigi*
8. Fruits of *Terminalia cattapa*
9. Seedlings of *Jatropha gossypifolia*
10. Seeds of *Delonix regia*
11. Seeds of *Withania somnifera*
12. Seeds of *Syzygium cumini*
13. Seeds of *Tamarindus indica*
14. Seedlings of *Ocimum sanctum*
15. Seedlings of *Mangifera*
16. Fruits of Teak



B.sc.III students collecting the seedlings from college Campus

Tree Plantation Programme

Department of Botany organised Tree Plantation programme on 15th August 2016 in college campus of Shri.Shivaji Arts, Commerce and Science College, Akot under the guidance of Hon. Principal Dr.A.L.Kulat .The objective for tree plantation is save the endangered environment and to beautify our life.. The students of B.Sc.II participated in this activity and planted the trees in college campus. Fifteen students and faculty members involved in this activity. On this occasion, Principal Dr.A.L.Kulat mentioned that it is need of the hour to plant trees; Our motive is not just to plant the saplings but rear and nurture them as well. In all 30 saplings had been planted namely *Delonix regia*, *Pongamia pinnata*, *Bauhinia*, *Azadirachta indica*, *Cassia species*, Palms, *Callistemon* etc.



Students of B.Sc.II planted the saplings in college Premises



Hon. Principal and faculty members planted the Saplings in college premises

Field Visit to Amona Forest for Extension Work

On 04 October, 2017, 15 students with Dr. S.N. Patole went for a trip to Amona Forest, Akot wildlife division with aim visit grass meadow which developed by the forest department. We arrived 10.00 a.m. We planned to visit the grass meadow and nearby forest area along with Forester, Mr. Patil RFO, Amona range, and Mr. Bhivate, Forest Guard, Akot wildlife division. Dr. Patole gave the information regarding the meadow development and purpose of the meadow to the staff of forest department. He also focuses on the palatable and non-palatable plant species of the forest. The objective of the visit was to get information of the wild plants and animals and grass meadow.

On the occasion of Wildlife week we removed the non-palatable plant species from the grass meadow. We note down the palatable and non-palatable species for the herbivorous animals like Deers, Bisons, Rabbits, Nilgai, etc. Dr. Patole gave the information on botanical names of the plants to the staff of the forest department and students, *Cymbopogon martinii*, *Brachiaria ramosa*, *Themeda triandra*, *Heteropogon contortus*, *Hyptis suaveolens*, *Madhuca longifolia*, *Lagerostromia parviflora*, *Tectona grandis*, *Bauhinia racemosa*, *Annona squamosa*, *Lannea coromandelica*, *Boswellia serrata*, *Sterculia urens*, *Ficus bengalensis*, *Emblica officinalis*, *Anogeissus latifolia*, *Dalbergia latifolia*, *Butea monosperma*, *Aegle mormelos*, *Celastrus paniculata*, *Clerodendrum serratum*, *Wrightia tinctoria*, *Chloroxylon swietenia*, *Woodfordia fruticosa*, *Zyziphus xylocarpa*, *Vitex negundo*, *Syzygium cumini*, *Saccharum spontaneum*, *Diospyros melanoxylon*.

Tree Plantation

2018-19

Department of Botany organised Tree Plantation programme on 12th August 2018 in college premises and Botanical garden of Shri.Shivaji Arts, Commerce and Science College, Akot under the guidance of Hon. Principal Dr.A.L.Kulat .The objective for tree plantation is for awareness about environment safety and nourishment of campus. Twenty students and three faculty members involved in this activity. The students and faculty members planted ornamental and medicinal plants. In all 15 saplings of ornamental plants and 15 saplings of medicinal plants had been planted namely *Ixora*, *Roses*, *Tecoma*, *Hamelia*, *Hibiscus*, *Nerium*, *Emblica officinalis*, *Annona*, *Ocimum* etc.



Students of B.sc.II planted the saplings

Celebration of International Women's Day

To honor womanhood ,Department of Botany,shri.Shivaji Arts, Commerce and Science college Akot has celebrated" International Women's day" on 9th March 2015 in NRSC hall. The objective of this day is to create awareness of gender equality for a healthy society. The function is attended by 105 students and all teaching and non teaching faculty. Dr. S.W.Raut Head, Department of Marathi, Shri.Shivaji Arts, Commerce and Science College, Akot presided over the function, He advised students to empower themselves. He said women as they are prospering equally well along with men and competing with men in all fields. Ku.Madhuri Deshmukh, Librarian, was the chief guest. Dr.S.V.Kolhe, Coordinator, Cultural Committee was present on the dias. The introductory speech was given by Dr.Manik Dhore, Head, Department of Botany. During programme students, Ku.Pranjali Bhagat, Ku.Poonam Mahale and Mr.Ashish Gawhale express their views on the occasion of International womens day. Ku.Madhuri Deshmukh talked about the success of women and their fight against gender equality. On the occasion of womens day we felicitated girl student those who have obtained highest marks in previous examination. Ku.Alka Puri proposed the vote of thanks.



Ku.Madhuri Deshmukh delivering speech on the Occasion of "International Womens Day"



Anchoring by Ku.Poonam Mahale B.Sc.II Student

Department of Botany

Excursion Tour at Salbardi and Simbhora Dam, Dist.Amravati

2015-16

As a part of curriculum, one day excursion tour was organised by Department of Botany and Department of Zoology on 11th February 2016 .The main objective was to familiarize the students with the flora and ecology of the region.32 students of B.Sc.III and five faculty members of Botany and Zoology were participated in this tour.Salbardi is on the border between Madhya Pradesh and Maharashtra located in Morshi Tahsil. Students first visited an ancient temple of Shiva. Thereafter students observed different plants growing in their natural habitats, reflecting the rich diversity of the flora of the region and noted the medicinal plants with botanical names. Thereafter students visited Simbhora dam. The dam is situated over the Wardha river. Faculty members gave the information of Simbhora dam to students. After visiting dam students started journey to Akot.



Students of B.Sc.III visited Salbardi

Celebration of International Women's Day 8th March 2016

To honor womanhood, Department of Botany, Shri.Shivaji Arts, Commerce and Science College, Akot has celebrated "International Women's day" on 8th March 2016 in NRSC hall. The objective of this day is to create awareness of gender equality for a healthy society. The function is attended by 105 students and all teaching and non teaching faculty .Ku.Madhuri Deshmukh, Librarian, Shri.Shivaji Arts, Commerce and Science College, Akot presided over the function, Dr.Anaghatai Sonkhaskar, Professor, Shrimati Laxmibai Gangane College, Akot was the chief guest.Dr.S.N.Patole,Coordinator ,Cultural Committee was present on the dias. The introductory speech was given by Dr.Manik Dhore, Head, Department of Botany. During programme students of B.Sc. Ku.Punam Mahale, Ku.Alka Puri and Ku.Pranjali Bhagat express their views on the occasion of International womens day. Dr.Anaghatai motivated the girl students with her inspirational and energetic talk. She addressed that their should be a balance between career and family and without a family support a woman can't achieve success. Ku.Madhuri Deshmukh gave the presidential speech and talked about the success of women and their need to develop in every area. The programme is ended with vote of thanks.



**Lecture delivering by Dr.Anaghatai Sonkhaskar
on the occasion of "International womens Day"**



**Presidential speech by Ku.Madhuri Deshmukh
on the occasion of "International Womens Day"**

Celebration of International Women's Day 8th March 2017

Department of Botany, Shri.Shivaji Arts, Commerce and Science College, Akot has celebrated "International Women's day" on 8th March 2017 in NRSC hall. The objective of this day is to spread the knowledge and awareness of women empowerment, their positions in the society and their achievements. The function is attended by 100 students and all teaching and non teaching women faculty .Dr.S.P.Wagh, Academic Incharge, Science Faculty presided over the function, Dr.S.W.Raut, Professor and Head, Department of Marathi was the chief guest. Ku.Swati Vaidya, Head, Department of Home-economics, Ku.Madhuri Deshmukh, Librarian and Dr.Manik Dhore, Head, Department of Botany were present on the dais. The introductory speech was given by Dr.Ku.M.M.Dhore, Head, Department of Botany highlighting the theme of International women's day. Ku.Madhuri Deshmukh highlighting the importance of woman empowerment. Guest speaker, Dr.S.W.Raut, advised women to empower themselves. He said that women should fight against the gender discrimination and help rural women to make them literate. Dr.S.P.Wagh delivered the presidential address. Prof.Swati Vaidya proposed the vote of thanks.



Ku.Ankita Hage delivering a speech on Womens Empowerment



Dr.Shankar Raut, Head, Department of Marathi delivering a speech

Excursion Tour at Tadoba National park 2017-18

An excursion tour to Tadoba National Park was organised by department of Botany during 8th to 10th October 2017. 4 teaching faculties and one non teaching faculty accompanied 49 students of B.Sc.II Biology in the excursion. Tadoba National Park lies in the Chandrapur district of Maharashtra. On dated 8th October we have started journey from college at 8.30 pm by bus .We reached Chandrapur on 9th October at 4.30 am. and at 5.30 am reached at Tadoba. At Tadoba students visited Tadoba Andheri Tiger Reserve (TATR).Here students have enjoyed Jungle Safari from Jipsy.The biodiversity of Tadoba was studied by the students. The national park is overshadowed of trees is Teak and Bamboos, other trees are Semal, Shisham, Butea, Salai, Dhawada are also found. On 9th October as afternoon students visited Anandwan is an Ashram and community rehabilitation centre which was established by Baba Amte.Here students got an opportunity to interact with Blind peoples. On 10th October we have started return journey to Akot.



Students enjoyed Jangle Safari



Students visited Anandwan

Celebration of International Women's Day

Department of Botany has celebrated International Women's Day on 9th March 2019 at 3.00 pm in auditorium hall of Shri.Shivaji Arts, Commerce and Science College, Akot. International women's day is a significance of social, cultural, economic and political achievement of woman. It aimed at imparting the values like empowerment and equality which bestowed respect to the female society. Hon. Principal Dr.A.L.Kulat presided over the function. Dr.Anghatai Sonkhaskar, Lecturer, Shrimati Laxmibai Gangane Junior college, Akot was the chief guest. On the same occasion, Mahila Udyojlka of Akot, Sau.Meeratai Korpe, Sau.Maltitai Deshmukh, Sau.Ranjanatai Tawale and Sau .Bhairavi Hingankar were the guest of honors. The introductory speech was given by Dr.Ku.M.M.Dhore, Head, Department of Botany. She explained the importance and history behind the celebration of this day. During programme guest of honors, Mahila udyojika of Akot felicitated by shawl and shripthal. Chief guest Dr.Anaghatai said gender equality is very important for a healthy society. The milestone to be reached is the basic information for a girl child in every family education will during awareness among the society. Guest of honors, Sau. Meeratai Korpe and Sau.Maltitai Deshmukh shared her views of struggle and success in their gruhudyog on the occasion of International women's day. Hon.Principal, Dr.A.L.Kulat delivered the presidential address. Hon.Principal encouraged the girl students to strive to be the best in their desired paths in life. The function is attended by 115 students, and all teaching and non teaching staff. Prof.Swati Vaidya proposed the vote of thanks.



Sau.Meeratai Korpe delivering a talk on the Occasion of "International Womens day"



Sau.Maltitai Deshmukh delivering a talk on the occasion of "International Womens Day"

SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT
DEPARTMENT OF BOTANY
INNOVATIVE ACTIVITY

REPORT

ON

TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS

The term “Green” means eco-friendly or not damaging the environment. This can acronymic ally is called as “Global Readiness in Ensuring Ecological Neutrality” (GREEN). “Green Accounting” can be defined as, systematic identification quantification, recording, reporting & analysis of components of ecological diversity & expressing the same in financial or social terms. “Green Auditing”, an umbrella term, is known by another name “Environmental Auditing”. In auditing literature both the terms are being used interchangeably. To implement the green audit other important aspects such as objective of green audit. Drivers of green audit, future scope, benefits, and advantages are necessary to understand. The green audit practically involves energy conservation, use of renewable sources, rain water harvesting, and efforts of carbon neutrality, plantation, hazardous waste management & E-waste management.

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institute which will lead for sustainable development. Shri Shivaji Arts, Commerce & Science College, Akot Dist. Akola, Maharashtra is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems. Being a premier institution of higher learning at Tahsil place, the college has initiated ‘The Green Campus’ program through the **Tree Plantation Audit**. The Tree plantation of is carried out every year from July to December. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution.

The methodology includes physical inspection of the campus for counting the plant species and identification of the plants, observation and preparation of the document. It works on the several facets of ‘Green Campus’ including Water Conservation, Tree Plantation, Waste Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit are to evaluate the

adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards. It can make a tremendous impact on student health and learning, college operational costs and the environment.

Recommendations:

1. Reviews periodically the list of trees planted in the garden, allot numbers to the trees and keep records. Give scientific names to the trees.
2. Promote environmental awareness as a part of course work in various curricular areas, independent student projects work, and community service.
3. Create awareness of environmental sustainability and takes actions to ensure environmental sustainability.

SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT

DEPARTMENT OF BOTANY

INNOVATIVE ACTIVITY

TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	INDIVIDUAL NUMBER OF PLANT
1	<i>Delonix regia</i> (Boj. ex Hook.) Raf.	Gulmohor	Gold Mohor	Caesalpiniaceae	10
2	<i>Tectona grandis</i> L.f.	Sagwan	Teak Plant	Verbenaceae	33
3	<i>Azadirachta indica</i> A. Juss.	Neem tree	Margosa	Meliaceae	77
4	<i>Bamboosa arundnacea</i> (Retz.) Willd.	Bamboo	Spiny bamboo	Poaceae	60
5	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Palaspapdi	Indian Elm, Jangle cork tree	Ulmaceae	11
6	<i>Albizia lebbbeck</i> (L.) Benth.	Siris	Women's tongue tree	Mimosaceae	10
7	<i>Butea monosperma</i> (Lam.) Taub.	Palas	Flame of the forest	Fabaceae	03
8	<i>Gmelina arborea</i> Roxb.	Shivan	White teak	Verbenaceae	04
9	<i>Polyalthea longifolia</i> Sonn.	Ashoka	Indian Mast tree, The Buddha tree	Annonaceae	69
10	<i>Murraya paniculata</i> (L.) Jack	Madhumalti	Orange Jasmine	Rutaceae	08
11	<i>Plumeria alba</i> L.	Chafa	White champa	Apocynaceae	06
12	<i>Aegle mormelos</i> (L.) Correa	Bel	Golden apple	Rutaceae	04
13	<i>Morinda citrifolia</i> L.	Noni	Indian mulberry	Rubiaceae	03
14	<i>Syzygium cumini</i> (L.) Skeels	Jambhul	Indian blackberry	Myrtaceae	04
15	<i>Tecoma stans</i> (L.) Juss. ex kunth	Ghanti phul	Yellow bells	Bignoniaceae	04
16	<i>Zizyphus mauritiana</i> Lam.	Bor	Indian plum	Rhamnaceae	03
17	<i>Casuarina equisetifolia</i> L.	Saru	Australian pine tree	Casuarinaceae	01
18	<i>Callistemon lanceolatus</i>		Bottle brush	Myrtaceae	11
19	<i>Tamarindus indica</i> L.	Chinch	Tamarind	Caesalpiniaceae	02
20	<i>Murraya koenigii</i> (L.) Spreng.	Kadhi Patta	Curry leaf tree	Rutaceae	03

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	INDIVIDUAL NUMBER OF PLANT
21	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjuna	Arjun Tree	Combretaceae	03
22	<i>Phoenix sylvestris</i> (L.) Roxb.	Shindi	Wild date plam	Arecaceae	01
23	<i>Vitex negundo</i> L.	Nirgudi	Common Chaste Tree	Verbenaceae	02
21	<i>Commiphora mukul</i> (Arn.) Bhandari	Guggul	Indian Bdellium Tree	Burseraceae	02
25	<i>Nyctanthes arbor-tristis</i> L.	Parijatak	Tree of Sorrow	Oleaceae	01
26	<i>Borassus flbellifer</i> L.	Tad	Fan palm Toddy palm	Arecaceae	02
27	<i>Ixora coccinea</i> L.	Ixora, Rugmini	Jangle Geranium	Rubiaceae	32
28	<i>Alstonia scholaris</i> (L.) R.Br.	Saptaparni	Blackboard Tree Devil tree	Apocynaceae	24
29	<i>Cocos nucifera</i> L.	Naral	Coconut tree	Arecaceae	15
30	<i>Nerium indicum</i> L.	Kaner	Oleander	Apocynaceae	03
31	<i>Nerium oleander</i> L.	Kaner	Oleander	Apocynaceae	15
32	<i>Hamelia patens</i> Jacq.	Hamelia	Hummingbird bush	Rubiaceae	11
33	<i>Millettia pinnata</i> (L.) Panigrahi	Karanj	Indian beech tree, Pongam oil tree	Fabaceae	57
34	<i>Melia azedirach</i> L.	Bakain Nimb	Bead Tree	Meliaceae	01
35	<i>Ficus benghalensis</i> L.	Vad	Indian banyan tree	Moraceae	01
36	<i>Ficus religiosa</i> L.	Pimpal, bodhi tree, Ashwatha tree	Sacred fig tree	Moraceae	07
37	<i>Manilkara zapota</i> (L.) P. Royen	Chiku	Sapodila plum	Sapotaceae	01
38	<i>Annona squamosa</i> L.	Sitaphal,	Custurd apple, Sugar apple	Annonaceae	06
39	<i>Tabernaemontana divericata</i> R.Br.ex Roem & Schult.	Tagar, Chandani	Moonbeam	Apocynaceae	08
40	<i>Terminalia catappa</i> L.	Jangli badam, desi badam	Indian almond tree	Combretaceae	01
41	<i>Bauhinia purpurea</i> L.	Rakta kanchan	Hawainian Orchid tree, Butterfly tree	Caesalpiniaceae	04

S.N.	BOTANICAL NAME OF PLANT	VERNACULAR NAME	Common English Name	FAMILY	INDIVIDUAL NUMBER OF PLANT
42	<i>Sapindus emarginatus</i> Vahl	Ritha	Soapnut tree	Sapindaceae	03
43	<i>Spathodea campanulata</i> P. Beauv.	Akash Shevga, Rugtura	African tulip tree	Bignoniaceae	09
44	<i>Dalbergia sissoo</i> Roxb.	Shisav, Kalarukh	Indian rosewood	Fabaceae	03
45	<i>Lawsonia inermis</i> L.	Mendi	Egyptian trivet	Lythraceae	03
46	<i>Caryota urens</i> L.	Bherli maad, Surmaad	Fishtail palm	Arecaceae	15
47	<i>Lagerostroemia parviflora</i> Roxb.	Bakli, bondga, lendiya	Crepe flower	Lythraceae	02
48	<i>Mimusops elengi</i> L.	Bakul, Maulshree	Spanish cherry, Bullet wood	Sapotaceae	08
49	<i>Hibiscus rosa-sinensis</i> L.	Jaswand	China rose	Malvaceae	22
50	<i>Limonia acidissima</i> L.	kauth	Wood apple	Rutaceae	01
51	<i>Capparis grandis</i> L.	Vaghati	Ceylon Caper	Capparaceae	01
52	<i>Pithecoelobium dulce</i> (Roxb.) Benth.	Vilayati chinch	Madras thorn	Mimosaceae	02
53	<i>Ailanthus excelsa</i> Roxb.	Maharukh	Indian tree of Heven	Simaroubaceae	03
54	<i>Annona reticulata</i> L.	Ramphal	Bull's heart	Annonaceae	01
55	<i>Psidium guajava</i> L.	Peru, Jam	Guava	Myrtaceae	01
56	<i>Ficus hispida</i> L.f.	Karvati	Rough leaved fig	Moraceae	02
57	<i>Peltophorum pterocarpum</i> (DC.) K. Hyene	Sonmohor	Copperpod	Caesalpiniaceae	01
58	<i>Ceiba speciosa</i> (A.St-Hil.)Ravenna	Kapok	Sheltering tree	Bombacaceae	01
59	<i>Cycas revoluta</i> Thunb.	Cycas plant	Japanes Sago palm	Cycadaceae	02
60	<i>Juniperus chinensis</i> L.	Juniper plant	Chinese Juniper	Cuppressaceae	10
	Total				613

SHRI SHIVAJI ARTS, COMMERCE & SCIENCE COLLEGE, AKOT
DEPARTMENT OF BOTANY
INNOVATIVE ACTIVITY
TREE PLANTATION AUDIT OF THE COLLEGE CAMPUS



Ailanthus excelsa



Albizia lebbeck



Calistemon lanceolatus



Mimusops elengi



Dalbergia sissoo



Delonix regia



Gmelina arborea



Commiphora mukul



Murraya paniculata



Gmelina arborea



Syzygium cumini



Tecoma stans



Vitex negundo



Plumeria alba



Pithecoelobium dulce



Aegle mormelos



Capparis zeylanica



Phoenix sylvestris

Workshop On Mushroom Cultivation Techniques

Department of Botany Shri.Shivaji Arts, Commerce and Science College, Akot organized one day workshop on “Mushroom Cultivation Techniques” for students. The workshop conducted on 12th March 2019 at Auditorium. Dr.S.P.Wagh, Academic Incharge, Science faculty inaugurated the workshop and motivated the students. Chief guest Dr.D.V.Hande, Associate Professor, Shri.Shivaji Science College, Amravati, Convener, Dr.Ku.M.M. Dhore, Coordinator, Dr.S.N.Patole, Ku.Ashwini Phokmare were present on the dais. Dr.S.N.Patole gave an introduction of the guest and welcomed him. The main objective of the workshop was to inspire the students for the entrepreneurship in the field of mushroom cultivation and its harvesting and marketing. Students were made aware of various practices for cultivation of mushroom.

The technical session I began at 12.00 pm., Dr. D.V.Hande, Associate Professor, Shri.Shivaji Science College, Amravati has given the first talk on importance of mushroom cultivation, various forms of mushroom and their uses in food. He addressed the students, Mushroom cultivation is a new investment opportunities so that they can start their business in a small scale in rural area.

The technical session II began at 2.00 pm.in Department of Botany, Dr.D.V.Hande has given practical demonstration of mushroom cultivation. The workshop was very informative and inspiring for the students. The mushroom cultivation workshop will be helpful to the students to start small scale production as self employment. As per the feedback received from the student, it was very good learning experiment. The workshop was attended by 225 students and five faculty members. Dr.M.M.Dhore proposed the vote of thanks.



**Dr.D.V.Hande delivering a talk on
“Importance of Mushroom and their types”**



Dr.D.V.Hande gave practical demonstration of Mushroom cultivation

Department of Botany

Excursion Tour at Chikhaldara, Dist.Amravati

As a part of curriculum, one day excursion tour was organised by Department of Botany on 5th February 2019 .The main objective was to familiarize the students with the flora and ecology of the region.85 students of B.Sc.II and two faculty members of department of Botany were participated in this tour. The tour was organized by Dr. S.N.Patole accompanied by faculty member Ku .Ashwini Phokmare. The tour was started at 6.30 am.from the college and reached at 11.00am at Chikhaldara. Students visited to Botanical garden where the Incharge of the tour Dr.S.N.Patole given the importance of garden and students had recorded the information about the garden and species maintained in the garden. Then students visited various points of Chikhaldara and observed rich diversity of the flora of the region .We have started our return journey to Akot.



Students of B.Sc.II (Biology)



Dr.S.N.Patole given the information of plants to students

Guest Lecture On Conservation of Tiger

The Department of Botany organized a guest lecture on the occasion of World Tiger Day on 29th July 2013 from 11.30 am to 12.45 pm in NRSC hall. This day celebrated for the messages to spread awareness for tiger conservation. The function was presided over by Hon. Principal Dr.A.L.Kulat. In the beginning, Dr.M.M.Dhore, Head, Department of Botany gave an introduction of the guest and welcomed him. Guest speaker Mr.Umesh Varma, Deputy Conservator of Forest, Akot Wild Life Division, Akot delivered a talk on "Conservation of Tiger". The lecture highlighted on the importance of conservation of Tiger and the lecture was very informative and inspiring for the students. The lecture was attended by 95 students and five faculty members. Prof.Dr.S.N.Patole proposed the vote of thanks



**Presidential speech by Hon. Principal,
Dr.A.L.Kulat**



**Lecture delivered by Mr.Umesh Varma
DFO, Wild Division, Akot**

Guest Lecture On Conservation of Biodiversity

The Department of Botany organized a guest lecture on 1st February 2014 from 12.30 pm to 1.45 pm in NRSC hall .The function was presided over by Dr.S.P.Wagh, Academic Incharge Science Faculty. In the beginning, Dr.S.N.Patole gave an introduction of the guest and welcomed him. Guest speaker Mr.Tushar Wankhade, Assistant Professor, Shri.Shivaji Science College, Amravati delivered a talk on “Conservation of Biodiversity”. The lecture highlighted on the importance of conservation of Biodiversity and how to conserve the flora and fauna and the lecture was very informative and inspiring for the students. The lecture was attended by 100 students and five faculty members. Dr.Ku.M.M.Dhore proposed the vote of thanks.



Anchoring by Ku.Uzma Akbani B.Sc.III student



**Prof.Tushar Wankhade delivering a lecture on
“Conservation of Biodiversity”**

Guest Lecture On “Beauty of the Past”

The Department of Botany organized a guest lecture on 7th August 2014 from 12.00 pm to 1.30 pm in NRSC hall .The guest lecture was arranged for B.Sc.I and II students. The function was presided over by Hon. Principal Dr.A.L.Kulat. Guest speaker, Dr.D.S.Talwankar, Dr.S.P.Wagh, Academic Incharge Science Faculty, Dr.M.M.Dhore, Head, Department of Botany, Dr.S.N.Patole were present on the dais. In the beginning, Dr.S.N.Patole gave an introduction of the guest and welcomed him. Guest speaker Dr.D.S.Talwankar, Associate Professor, G.S.College, Khamgaon delivered a talk on “Beauty of the Past”. He discussed about the importance of Paleobotany, formation of fossils and different types of fossils. The lecture was very informative and inspiring for the students. The content covered was beneficial for the students of B.Sc.I by getting the knowledge of different processes of fossilisation and types of fossils which is in the syllabus. The lecture was attended by 100 students and four faculty members. Dr.Ku.M.M.Dhore proposed the vote of thanks.



Presidential speech by Hon.Principal Dr.A.L.Kulat



**Lecture delivering by Dr.D.S.Talwankar on
“Beauty of the Past”**

Guest Lecture On “Basic Concepts in Biotechnology”

A guest lecture on “Basic Concepts in Biotechnology” was organised by Department of Botany on 16th February 2016 at NRSC hall of Shri.Shivaji Arts, Commerce and Science College, Akot for the students of B.Sc.II and B.Sc.III. The purpose of guest lecture is a way of enriching our students with the latest updates of the subject. Dr.S.P Wagh, Academic Incharge, Science faculty chaired the programme. The guest speaker was Dr.Mangesh Moharil, Scientist, Dr.P.D.K.V. Akola. Dr.R.S.Dhande delivered introductory speech. Ku.Alka Puri conducted the proceedings. Dr.Mangesh Moharil delivered a talk on “Basic Concepts in Biotechnology”. In his talk he emphasized the importance of basic concepts in Biotechnology. The lecture is very informative for the students of B.Sc III biology as a part of their syllabus. The lecture was attended by 105 students and four faculty members. Dr.M.M.Dhore proposed the vote of thanks.



Anchoring by Ku.Alka Puri B.Sc. III student



**A lecture delivering by Dr.Mangesh Moharil,
Scientist P.D.K.V., Akola**

Guest Lecture On “Paleobotany”

The Department of Botany Shri.Shivaji Arts, Commerce and Science College, Akot organised guest lecture on 30th January 2016 at NRSC hall. The purpose of guest lecture is a way of enriching our students with the latest updates of the subject .The guest speaker was Dr.Pratiksha Kokate, Associate Professor, Shri.Shivaji Arts, Commerce and Science College, Akola. She delivered a lecture on “Introduction to Palaeobotany”.The lecture was attended by 100 students and 5 faculty members. Dr.S.P.Wagh, Academic Incharge, Science Faculty chaired the function. Dr.M.M.Dhore, Head, Department of Botany introduced the guest and aim of the lecture. Dr.P.S.Kokate discussed on the Introduction of Paleobotany. She emphasized on process of fossilization and types of fossil The lecture is very informative for the students. The content covered was very beneficial for the students of B.Sc.I for getting the knowledge of different types of fossils which is in the syllabus. Dr.S.N.Patole proposed the vote of thanks



**Dr.P.S.Kokate delivering a guest lecture on
“Paleobotany”**



Introductory speech given by Dr.M.M.Dhore

Guest Lecture On “Medicinal Plants and their Importance”

A guest lecture on “Medicinal Plants and their importance” was organised by Department of Botany on 4th September 2016 at NRSC hall of Shri.Shivaji Arts, Commerce and Science College, Akot for the students of B.Sc.II and B.Sc.III. The guest speaker was Dr.S.P.Rothe, Professor, Shri.Shivaji Arts, Commerce and Science College, Akola. He delivered a lecture on “Medicinal Plants and their importance”. The lecture was attended by 100 students and 5 faculty members. Dr.S.P.Wagh, Academic Incharge, Science Faculty presided over the function. Dr.M.M.Dhore, Head, Department of Botany introduced the guest and aim of the lecture. Guest speaker Dr.S.P.Rothe enlightened the students with the concept of medicinal plants and their importance in daily life. He said that medicinal plants have been known for millennium as a rich source of therapeutic agents for the prevention of various diseases occupying an important place in the socioculture and medical field. The lecture is very informative and inspiring for the students. Dr.S.N.Patole proposed the vote of thanks.



**A lecture delivered by Dr.S.P.Rothe, Professor and Head
Department of Botany, Shri.Shivaji Arts, Commerce and Science College, Akola**

Guest Lecture On “Plants and Environment”

The Department of Botany organized a guest lecture on 25th January 2017 from 12.00 pm to 1.30 pm in NRSC hall .The function was presided over by Academic Incharge, Science faculty Dr.S.P.Wagh, Guest speaker, Dr.S.N.Ingole, , Dr.M.M.Dhore, Head, Department of Botany, Dr.S.N.Patole were present on the dais. In the beginning, Dr.M.M.Dhore gave an introduction of the guest and welcomed her. Dr.S.P.Wagh gave the presidential address. Guest speaker Dr.Shubhangi N.Ingole, Associate Professor and Head, Department of Botany, Bar. R.D.I.K.college, Badnera delivered a talk on “Plants and Environment”. She discussed on How do plants help the environment. She also emphasized and shared with us the importance of balanced ecosystem and sustainable development. The lecture was very informative and inspiring for the students. Important benefit from having guest speaker is the enhancement of the students. The lecture was attended by 100 students and four faculty members.Dr.S.N.Patole proposed the vote of thanks.



**A lecture delivered by Dr.Shubhangi Ingole,
Head, Department of Botany, R.D.I.K.college, Badnera**



**Presidential speech by Dr.S.P.Wagh, Academic
Incharge, Science Faculty**

**Guest Lecture
On
“Origin and Evolution of Plants”**

The Department of Botany organized a guest lecture on 3rd August 2017 from 12.30 pm to 1.45 pm in NRSC hall .The function was presided over by Dr.S.P.Wagh, Academic Incharge Science Faculty. In the beginning, Dr.M.M.Dhore gave an introduction of the guest and welcomed him and addressed students regarding the content of the lecture. Guest speaker Dr.D.K.Koche, Associate Professor, Shri.Shivaji Arts, Comm.and Science College, Akola delivered a talk on “Origin and Evolution of Plants”. In his lecture he discussed the evolutionary history and diversity of plants from the origin of algae to appearance of flowering plants. The students have got the knowledge of origin of various groups of plants in different eras. The lecture was very fruitful and inspiring for the students. The lecture was attended by 100 students and four faculty members.Dr.S.N.Patole proposed the vote of thanks.



Dr.D.K.Koche delivering a lecture on “Origin and Evolution of plants”

Guest Lecture On “Embryology of Angiosperms”

The Department of Botany organized a guest lecture on 21st September 2018 from 12.00 to 1.45 pm in Auditorium of Shri .Shivaji Arts, Commerce and Science College, Akot .The function was presided over by Dr.S.P.Wagh, Academic Incharge Science Faculty. In the beginning, Dr.S.N.Patole gave an introduction of the guest and welcomed him. Guest speaker Mr.Shilanand Hiwarale,HISTA Amravati delivered a first talk on “Embryology of Angiosperms.” The second lecture highlighted on the importance of competitive examination and how to prepare for the competitive examination. The lecture was very informative and inspiring for the students. The lecture was attended by 105 students and five faculty members. Dr.Ku.M.M.Dhore proposed the vote of thanks.



Presidential speech by Dr.S.P.Wagh



Mr.Anand Hiwarale delivering a guest lecture

Guest Lecture On “Paleobotany”

The Department of Botany organized a guest lecture on 27th March 2019 from 1.30 pm to 2.30 pm in Department of Botany at Shri.Shivaji Arts, Commerce and Science College, Akot .The function was presided over by Dr.S.P Wagh, Academic Incharge, Science Faculty .Guest speaker Dr.M.B.Bobade, Mr.S.N. Patole, Assistant ProfessorDepartment of Botany, Ku.Ashwini Phokmare were present on the dais.In the beginning, Dr.S.N.Patole gave an introduction of the guest and welcomed him. The guest lecture was arranged for B.Sc.I year students. Guest speaker Dr.M.B.Bobade, Assistant Professor, Mahatma Fule Mahavidylaya, Warud delivered a talk on “Palaeobotany”.The content covered was beneficial for the students by getting the knowledge of different processes of fossilization and types of fossils which is in the syllabus. He discussed about the importance of Paleobotany, formation of fossils and different types of fossils. The lecture was very informative and inspiring for the students. The lecture was attended by 75 students and three faculty members. Ku.Deepika Pimprale proposed the vote of thanks.



Anchoring by Ku.Ashwini Phokmare



**Dr.M.B.Bobade delivering a lecture on
“Paleobotany”**

POSTER COMPETITION ON “ENVIRONMENT”

A poster competition was organised by Department of Botany on 19th January 2016 at 3.00 pm in the Department of Botany. The theme for the poster competition was “Environment”. The aim conducting behind this competition was to spread awareness and encouraged the students to protect the environment and sustainable use of biological diversity on the earth. Total 25 students from B.Sc.Biology were participated in this competition. Dr.S.N.Patole explained the importance of protection of the environment. The chief guest of the event was Dr.D.S.Thakare, Head, Department of Physics. On this occasion he said that with such competitions students get involve with the environment and understand it better. The competition was judged by Prof.Umar Bhati and Mr.Pandit Gawande. Students participated with enthusiasm and made very beautiful posters which gave the message of saving our mother earth and provide a green environment to our future generation. Student’s efforts and initiative was appreciated by judges, Prof.Umar Bhati and Mr.Pandit Gawande. The winners were given cash prizes .Ku.Punam Mahale and Ku.Pranjali Bhagat secured first prize, Ku.Namrata Sharma secured IInd prize, Mr.Shashwat Telgote secured IIIrd prize, Ku.Vaishnavi Rele and Mr.Sohail Anwar Ali got consolation prizes. All faculty members of the department congratulated the students. Dr.M.M.Dhore proposed the vote of thanks.



**Dr.D.S.Thakare, delivering a speech on
“Concept of Environment”**



**Prof.Umar Bhati and Mr.Pandit Gawande
assessed the posters of students**

**Poster Competition
On
“Conservation of Biodiversity and Natural Resources”**

A poster competition was organised by Department of Botany on 28th January 2017 at 3.00 pm in the Department of Botany. The theme for the poster competition was “Conservation of Biodiversity and Natural Resources”. The competition was organised with a purpose to spread awareness among the students about biological diversity and human responsibility of natural resources for conservation of nature. This activity kept the students engaged and it was organized to explore and encourage activity in students and offer them a platform to show their skills. Total 25 students from B.Sc.Biology were participated in this competition. Dr.S.P. Wagh, Academic Incharge, Science faculty was the chief guest. The competition was judged by Prof.Umar Bhati and Dr.S.N.Patole. The winners were given cash prizes Ku.Shyamal Bhawe B.sc.I secured first prize,Ku.Akansha Pinjarkar B.Sc.I secured second prize,Vishwajit Tayade B.sc.I secured third prize, Ku.Nuzhat Anjum, Prajwal Pawar and Amit Khedkar got consolation prizes. All faculty members of the department congratulated the students.



**Dr.S.P.Wagh, Academic Incharge, Science Faculty
addressed the students**



**Dr.S.N.Patole and Prof.Umar Bhati
assessed the posters**

Poster Competition
On
“Environment and Biodiversity”

A poster competition was organised by Department of Botany on 20th January 2018 at 3.30 pm in the Department of Botany. The theme for the poster competition was “environment and Biodiversity”. The competition was organised with a purpose to spread awareness among the students about environment and biological diversity. This activity kept the students engaged and it was organized to explore and encourage activity in students and offer them a platform to show their skills. Total 28 students from B.Sc.Biology were participated in this competition. Dr.S.P. Wagh, Academic Incharge, Science faculty was the chief guest. He said that with such competitions students get involve with the environment and also emphasized over the importance of plantation. The judges of this competition were Mr.Pandit Gawande and Dr.S.N.Patole. The prizes were distributed to the participants .It was an interesting competition for the students as they participated with great enthusiasm. All faculty members congratulated the students. At the end vote of thanks was given by a student Ku.Shyamal Bhawe.

Essay Competition On My Solutions to Environmental Problems

On the eve of International Forest Day, Department of Botany conducted essay competition for the students of B.Sc. Biology. The competition held on 22nd March 2018 in Department of Botany. The topic for essay competition was “My Solutions to Environmental Problems” and was circulated amongst the students in advance. 21st March is celebrated as the International day of Forest. The purpose of the competition was to encourage the students to enhance their thinking about environmental problems. Twenty four students enrolled the names for the competition. Out of twenty four students only nineteen students took part in the competition. Dr.M.M.Dhore, Dr.S.N.Patole, Ku.Ujjwala Raut and Ku.Deepika Pimprale conducted this event. Dr.S.N.Patole and Ku.Ujjwala Raut assessed the essays. The essay was judged on the basis of student’s presentation and creativity. The first three best essays were given cash prizes. Ku.Akanksha Pinjarkar B.Sc.II got first prize, Ku.Vaishnavi Chede B.Sc.I got second prize and Ku.Pornima Gawande B.Sc. I got third prize.

Poster Presentation Competition On “Protection of Ozone layer and Climate”

On the occasion of International ozone day, A poster presentation competition was organised by Department of Botany on 19th September 2018. This competition was arranged for B.Sc.Biology students. The theme for the poster presentation was “protection of ozone layer and climate. The objective of competition was to create social and environmental awareness among students and to understand the different processes that destroy the ozone in the atmosphere. The programme started with welcome speech by Dr.M.M.Dhore Head, Department of Botany. She explained on the importance of ozone layer. After Prof.Anil Somwanshi judge of this competition has deliver speech on importance of ozone layer, their protection, stop using the products which are harmful for the environment. Dr.S.P.Wagh in his presidential speech stressed on saving the ozone layer, every student could contribute to the nourishment of ozone to protect them. Forty six students were participated in this competition. Later the posters were assessed on the basis of creativity and presentation. Finally, Dr.M.M.Dhore declared the winners for the competition. At the end vote of thanks was given by Dr.S.N.Patole.



**Prof.Anil Somwanshi delivering a speech on
“Protection of ozone layer”**



**Dr.S.P.Wagh and Prof. Anil Somwanshi assessed
the posters**

Essay Competition On Importance of forest

On the eve of International Forest Day, Department of Botany conducted essay competition for B.Sc. I Biology students. The competition held on 25th March 2019 in Department of Botany. The topic for essay competition was "Importance of Forest". The topic was circulated amongst the students in advance. 21st March is celebrated as the International day of Forest. The aim behind conducting the essay competition was to create awareness about conservation and preservation of forests and trees among the students and enhance their thinking and writing skills. Twenty students enrolled the names for the competition. Out of twenty students only fifteen students took part in the competition. Dr.M.M.Dhore, Dr.S.N.Patole, Ku.Ujjwala Raut, Ku.Ashwini Phokmare and Ku.Deepika Pimprale conducted this event. Dr.S.N.Patole and Ku.Ujjwala Raut assessed the essays. The essay was judged on the basis of students vocabulary and presentation and first three best essays were given cash prizes. Ku.Renuka Zade B.Sc.I got first prize, Ku.Sakshi Bahal got second prize and Ku.Sakshi Pundkar B.Sc. I got third prize and Ku.Vaishnavi Sontakke got consolation prize.