

STAR STATUS

Star College Scheme initiative of Department of Biotechnology to support colleges offering undergraduate education to improve science teaching. The Programme aims to improve the skills of teachers by organizing faculty training, improved curriculum and emphasis on practical training to students by providing access to specialized infrastructure and consumables.

Vidya Pratishthan Arts Science and Commerce is a recipient of the Star College Scheme during the first phase of call. The support has strengthened physical infrastructure in laboratories, library, teaching aids, and promoted networking with neighboring institutes. Hands-on training and projects of day to day relevance have enhanced interest in students to pursue science courses at Undergraduate level. Innovation in teaching, translational research and implication of the outputs for societal benefit was VPASCC's positive thinking, which helped to fetched the prestigious "**STAR STATUS**" for the college.

1. **Year of Support:** From 2009 to 2013
2. **Extended Year of Support:** 2 Years (2013-2015)
3. **Star Status:** 2016
4. **Department supported during extension period:** Biotechnology, Botany, Microbiology, Zoology.
5. **Total Grant Received during the period of support:**
 Initial grant (2 years) : 54 Lakhs
 Extended period (2 years) : 20 Lakhs
 Status (3 years) : 89 Lakhs

6. Department wise performance during the period:

Course	Cut off point	Cut off point after								
		1st year 2009- 10	2 nd year 2010-11	3 rd year 2011- 12	4 th year 2012-13	5 th year 2013-14	6 th year 2014-15	7 th year 2015-16	8 th year 2016-17	9 th year 2017-18
B.Sc.	Before 2008-09									
Biotechnology	64%	66%	67%	68%	69%	73%	74%	73%	75%	75%
Botany	61%	64%	65%	65%	67%	69%	70%	71%	69%	69%
Microbiology	60%	60%	63%	65%	65%	68%	68%	70%	73%	70%
Zoology	64%	64%	65%	65%	67%	69%	70%	70%	68%	65%

7. Student Achievements:

- Students (18) of the four participating departments participated in **AVISHKAR** research competition at University level. Students presented their innovative ideas through posters and models
- Students (85) of the microbiology department qualified 17th State Level Microbio Olympiad at R. C. Patel College, Shirpur on 27th January, 2018. Team of 3 students of SY ranked 8th the competition.

8. Activities:

➤ Certificate course(s):

- Certificate course on '**Bioprocess Technology of Bioinoculants**', of 30 Hrs. was organized from 20th to 24th Feb, 2018 with 53 students from D. A. V. College, Kathmandu, Nepal (11), Jahangirnagar University, Savar, Dhaka, Bangladesh (01) and VPASCC College (41).

- One Day State Level Workshop was organized on “**Intellectual Property Rights (IPR)**” in collaboration with Lex Regia Institute, Nagpur. Total 420 Students and Staff were benefited.
 - One Day Workshop “**Key Concepts in Animal Development**” in collaboration with Agharkar Research Institute, Pune. Total 160 students were benefitted.
 - One Day Workshop “**Key Concepts in Plant Development**” in collaboration with Agharkar Research Institute, Pune and Department of Zoology, Sir Parshurambhau College, Pune. Total 160 students were benefitted.
- **Blood group and hemoglobin checking activity-** On the occasion of Hon. Ajit dada’s Pawar birthday department had organized Blood group and hemoglobin checking activity on 24th to 26th July 2017 for all college students. 701 [220 Boys + 481 Girls] students gets benefited.

➤ **Science Day Celebration:**

Biotechnology, Microbiology Botany and Zoology (UG & PG) students celebrated the Science Day with poster presentation competitions and models.

➤ **‘Wild Life Conservation Week’ from 1st to 7th October 2017:**

- Exhibition of live specimens belonging to various plant groups, Presentation and display of poems on flowers and nature, Exhibition of locally available plants from Vidya Pratishthan campus and around Baramati, Exhibition and display of Nakshatra Udyan plants.

9. **Interdepartmental activities conducted:**

Guest Lectures:

Name of the Resource Person and Address	Title of the Topic	Beneficiaries
Dr.Obinna Ajunwa, Department of Microbiology, Modibbo Adama University of Technology, Yola, Adamawa State, Nigeria	‘Trapping Electrons From Microbial Cells – A Biotechnological Perspective’	220 beneficiaries.
Dr. Kapadnis B., <i>Emiratus Professor, Department Of Microbiology, SPPU, Pune</i>	Fungal diversity	160 beneficiaries.
Mr. Siddharth Salunke, Director, Bio Era Life Science Solutions Ltd., Pune	‘Bio-Entrepreneurship’	220 beneficiaries.
Dr.Anjana Singh, Former Head, Central Department of Microbiology, Tribhuvan University, Kathmandu, Nepal and Academician, Nepal Academy of Science and Technology, Khumalter, Nepal	‘Present Scenario on Developments in Microbial Technology in Nepal	70 Beneficiaries
Dr. Bhalchandra D. Bhole, Ex- Head, Abasaheb Garware College, Pune	‘Historical Perspectives and acquiring skills in Microbiology’	140 Beneficiaries students
Dr. Savita Datar, Head of Department, Department of Zoology, Sir Parshurambhau College, Pune.	Several Aspects of Animal Tissue Culture	
Mr. MartandThomare, Production Manager, Serum India Pvt. Ltd., Pune	Job Opportunities in vaccine manufacturing industries	80 Beneficiaries
Live telecast of Virtual lecture -Microbiologists Society India organized	1. Career opportunities in	38 students

1. Dr. A.M.Deshmukh 2. Dr. Bharat Shinde	Microbiology 2. Mycorrhizae	42 students
Dr. Anil Dusane, Associate Professor, Department of Botany, Sir Parshurambhau College, Pune.	Prospects and challenges in Life Sciences	80 Beneficiaries
Mr. Sanjay Patil, BAIF, Pune	'Desi seeds and conservation of biodiversity'	220 beneficiaries.
1. Dr. K.R. Gandhe Modern College, Pune 2. Dr. Mrs. Gandhe, Modern College, Pune 3. Dr. N.N. Patil, C.T. Bora College, Shirur, 4. Dr. S. K. Potdar, PDEA's Waghire College, Saswad.		250 beneficiaries.

➤ Academic Visits:

Departmental visits were organized for the F.Y., S.Y. and T.Y. students as part of their curriculum: Kas plateau (World Heritage Center of Biodiversity by UNESCO World Heritage Site); Mahabaleshwar; Pratapgadh; Fish Seed Farm, Hadapsar; Apiculture Research Center, Shivajinagar; Rajiv Gandhi Zoological Park, Katraj; Malavali; Lohgad; Lonawala; Zoological park & Bird sanctuary at Mysuru; Balaji Mushrooms, Someshwar; United Spirits, Jalochi; Schreiber Dyanamix Ltd. Baramati.

10. Infrastructure facility:

Participating departments were equipped with instruments viz., Shaker incubator – Remi; Digital balance - Shimadzu; p^H Meter – Systronics; Laminar air flow – Microfilt; Autoclave – Equitron; UV- Visible Spectrophotometer – Systronics; Digital water bath – Systronics; Oil Immersion Compound Microscopes- Lawrence & mayo- 25 No to fulfill the practical component of the students.

11. Innovations introduced for UG students in practical's and demonstrations:

- Involvement of students in the day-to-day problems/difficulties faced by society like water quality, waste Management etc to formulate a onsite solution through their practical knowledge.
- Involvement of Alumni to revisit the department, interact with the students, share their experiences with reference to academic-industry.

12. Qualitative improvements due to DBT support:

- Star College supports has helped in strengthening present curriculum and upgrade the laboratories to provide maximum hands-on for undergraduate students in four departments of Biotechnology, Botany, Microbiology, Zoology.
- Successful initiation of interdisciplinary activities focused on studies in life sciences.
- Platform for project based learning at under-graduate level.

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