

#### **5.1.4 Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year:2020-2021**

Name of the Activity conducted by the HEI to offer guidance/coaching for competitive examinations during the year

<b>Sr.No.</b>	<b>Details of competitive examination preparation</b>
<b>1</b>	COMPETITIVE EXAMINATION QUESTION PAPER SOLVING SESSIONS BY DEPARTMENTAL ALUMNI
<b>2</b>	Competitive Examination Question Paper Solving Sessions
<b>3</b>	Online question papersolving session by department alumnus Ms. Chinmayee Shukla
<b>4</b>	An interactive session on competitive exam preparation by four meritorious alumni students on
<b>5</b>	Session on writing “Statement of Purpose (SOP)”

**Name of the Activity conducted by the HEI to offer guidance / coaching for career counseling during the year 2020-2021**

<b>Sr.No.</b>	<b>Details of career counseling</b>
<b>1</b>	Session on "Build Your Career " under the Motivational Lecture Series
<b>2</b>	Ten-day webinar series on 'career Guidance'

**Department of Biotechnology and Microbiology**  
**Webinar on Career Guidance**  
**Activity Report**

Department of Biotechnology and Microbiology had organized ten-day webinar series on 'career Guidance' during 9<sup>th</sup> to 18<sup>th</sup> July 2020. Dr. Kalpita Mulye, Dr. Jayashree Pawar and Ms. Judith talker from the Department organized all these sessions. The sessions were kept open for students as well as parents.

On 9<sup>th</sup> July Dr. Jayashree Pawar, Assist. Prof, Department of biotechnology and microbiology, gave overview of different career opportunities for biological sciences students. She elaborated on the opportunities that can open up after qualifying competitive exams like JGEEBILS, JAM, JNU, JNCASR, NIV, CFTRI etc. Information about paper pattern of these exams, marking scheme and preparation for the same was also provided. Giving interesting examples, she also stressed on entrepreneurship as a promising opportunity for youth in view of the urge for 'Atmanirbhar Bharat' by Honourable Prime Minister. Hundred and nineteen students attended the session.

Ms. Chinmayee Shukla, alumnus of the Department, was the speaker on 10<sup>th</sup> July 2020. Ms. Chinmayee, who had cleared JNU examination in 2016 (AIR 210) to join M. S. University of Baroda for masters course, currently pursuing Ph.D. at IIT Gandhinagar, shared her experience at both these esteemed Institutions. She also gave a brief overview of her current research work on quadruplex nucleic acids. She explained in detail, the different competitive exams the undergraduate students can opt for; along with tips to study for these exams. Hundred and twenty five students attended the session.

The first speaker on 11<sup>th</sup> July was Mr. Yash Rane, recipient of the presidential fellowship, USA, during his MBA studies, currently working as manager- corporate strategy, Amgen Biotech. In his lucid talk he guided the students on 'how to decide career path', by drawing a vein diagram consisting of 'love and passion for work', 'one's strengths' and 'market needs'. He mentioned that the point where the circles integrate would be the point of focus for building one's career. He also explained the importance of self evaluation and exposure to different co-curricular and extra-curricular activities in building career. He also elaborated on various job opportunities in Indian pharmaceutical companies while answering to the students' questions.

Mr. Yash's talk was followed by session by Ms. Gauri Page, Assistant R&D manager, HiMedia Laboratories Pvt. Ltd. Ms. Gauri, while explaining her career path, stressed on the importance of punctuality, sincerity and smart-work in career. She not only motivated the students to do internships and training programs from Institutes of International repute, but also suggested names of such Institutions in Mumbai and Pune. By displaying an interesting video, she emphasized the significance of self-learning and practical application of concepts. Hundred and twenty three students attended the sessions.

Dr. Shabari Sarang, Principal Scientist, Reliance Life Sciences, was the speaker on 12<sup>th</sup> July. Dr. Shabari, who has done masters from Calicut University, elaborated on importance of exposure of students to different activities like research paper presentation, research project designing, budgeting and presentation for self development. She gave valuable tips to overcome stage fear and present confidently. During the later part of her talk, she shared her current experience involved in COVID-19 testing. She narrated the safety precautions to be taken while testing, the kind of tests being performed (real time PCR as well as antibody detection methods) as well as manual and semi-automated work flows. Hundred and twelve students attended the session.

On 13<sup>th</sup> July, Mr. Yash Deshpande, another alumnus of the Department, M.Sc. from Banaras Hindu

University, currently pursuing Ph. D. from IIT Mumbai, guided the students. Mr. Yash elaborated on the enriching learning environment at Banaras Hindu University. He shared fond memories of planning a research project, handling of sophisticated instruments, personal attention by eminent scientists when approached at BHU. He mentioned complete funding along with scholarship from UGC as well as less of commuting time that could be utilized for in-depth studies as added advantages while doing masters course from such renowned Universities.

Mr. Yash guided the students in detail, on how to prepare for competitive exams. He emphasised on points like referring to fundamental reference books to clear concepts, understanding the framing of questions in such exams, ways of studying physics and maths etc. Giving his own example, he gave valuable tips to overcome the 'fear factor' while appearing for these competitive exams. He asked the students to read the question properly rather than mere rushing through long questions to avoid negative marking and concentrate on time management during the exams to complete the paper and score better. He stressed on developing oneself by pushing 'out-of box' by voluntarily opting for journal club and mini-research project activities organized by the Department. He mentioned the efforts of departmental teachers which made him present in International conference organized by the Department, ICONTESA 2017; as well as his thrilling experience of presenting at the Young Scientist Fair and Contest at Copenhagen, Denmark which bagged the team 'Gold Medal' in the International Category. Seventy eight students attended the session.

The students were excited to meet two dynamic young entrepreneurs as speakers on 14<sup>th</sup> July. Ms. Yogita Narvekar, founder Manager, TechnoCraft, an ISO 9001-2015 Certified company involved in manufacture of scientific instruments. Ms. Yogita, in her lucid talk, took the audience through her journey as an entrepreneur, from finalizing place for setting up business, planning with respect to finances, fulfilling various government formalities like gumasta license, GST account etc., market survey and acquiring skilled labour to maintain the quality of brand. She motivated the students to think of unique ideas and start with a venture during the lock-down period to support their family.

The next speaker for the day was Mr. Bidhan Biswas, Managing Director at Brandmaker 333 Media Solutions LLP, Mumbai. Mr. Bidhan, narrated the interesting story of starting his advertising agency in a coffee shop with no infrastructure, to a stage today, when he is well established in his business with office in Andheri, Mumbai. He mentioned the importance of doing 'market research' and learning the 'know-hows' in setting up a business. He guided the students to: 'Learn from one's idol and not only peers', try to identify the need and set up business to 'fill the gap'. Giving his own example, he stressed on the importance of dedication in work. He also asked the students to 'pursue ones passion to enjoy life' along with building career. Sixty six students attended the sessions.

Two more alumni of the Department were the speakers on 15<sup>th</sup> July. Mr. Prathamesh Choughule, Data Management, Senior Analyst, Accenture Solutions Pvt. Ltd., began the session. He shared his work experience at Prabhat dairy, Navi Mumbai; Cognizant Technology Solutions and Accenture Solutions Pvt. Ltd.. He mentioned how his 'eagerness to learn' and 'finding different ways of doing a challenging task rather than working monotonously' helped him achieve success in all these jobs. He explained, in detail, the opportunities in clinical research and data analysis that he is currently involved in. He also elaborated on different career paths that would help students get job in this area.

Ms. Mansi Datar, who has worked as educator at Avalon Heights International School, and recently has got admitted to masters program at Johns Hopkins University, USA, continued the session. She mentioned that industrial visit during last year of graduation was a turning point for her and made her serious about the subject. She spoke on medical coding as a promising job opportunity. She also guided the students on getting into foreign Universities, specially on 'how to apply' and 'how to score in exams like TOEFL and IELTS'. She urged the students to build a career that they would

enjoy as a passion. Sixty eight students attended the sessions.

Mr. Nikhil Pahelkar, alumnus of the Department, M.Sc. From IIT Mumbai was the resource person on 16<sup>th</sup> July. He began his session by enlisting different competitive exams the students may appear for after graduation, and also the need to join these Institutions of International repute. He insisted that the students should start studying for the mentioned exams right from second year of graduation. He provided a list of important topics to be concentrated on, and useful links for study. He also gave an overview of different fields other than research that Microbiology and Biotechnology students can opt for. In the later part of his talk, he briefed his interesting research work on 'Studies on plasmepsins of *Plasmodium falciparum* to develop anti-malarial chemotherapeutic agent' at IIT Mumbai. He shared the experience of using high-end techniques like protein crystallography and X-ray diffraction analysis. Sixty six students attended the sessions.

The last session on 18<sup>th</sup> July was by Dr. Vinay Murtadak, who narrated his journey right from graduation in Biotechnology from Pune University to current position as application specialist for advanced therapies division at Sartorius Stedim Biotech, Germany. He too, mentioned the significance of participation in co-curricular activities like presentations and research project during graduation. He continued his talk, explaining his research work during masters course from National Institute of Virology, Pune, on 'Avian influenza H9N2 virus from India for potential use as a candidate vaccine'. He then briefed students on his doctoral research work from Friedrich Alexander University, Erlangen-Nuremberg, Germany, on a very interesting topic '*in-vitro* analysis of the impact of kaposi's sarcoma-associated Herpesvirus on experimentally induced necroptosis'. He explained his current work profile in detail while concluding the session. Fifty one students attended the session.

After the intriguing session by Dr. Vinay, Dr. Jayashree concluded the webinar. She urged the students to introspect their likings and capacities and groom and update themselves to positively utilize the lock-down period and build successful desired career.

**VPM's B. N. Bandodkar College of Science (Autonomous)**

**Department of Biotechnology and Microbiology**

**Competitive Examination Question Paper Solving Sessions**

**Activity Report**

**Department of Biotechnology and Microbiology, B. N. Bandodkar College of Science**, had organized **question paper solving sessions by Mr. Nikhil Pahelkar**. Mr. Nikhil, alumnus of the Department, has cleared several exams for the M.Sc. - JAM (Biotechnology and Life science both), JNU CEEB, Ferguson College entrance test for biotechnology. He has completed his Master's degree in Biotechnology from IIT Bombay. While preparing for his doctorate, he cleared GATE exam and is currently a Ph.D. research scholar in Bacterial Pathogenesis Lab, Molecular biophysics department, Indian Institute of Science, Bangalore. His Major Research Area is "Structural Biology and Protein Biochemistry, X ray crystallography and Bioinformatic analysis (Docking and Simulations)". Mr. Nikhil Pahelkar, being an alumnus of the Department, was very eager for sharing his knowledge with the students who are currently aspiring for clearing various competitive exams. He guided the students for solving questions from several competitive exams like JAM, JNU and TIFR.

The session was organized online, on google meet, over a span of three days. On **7<sup>th</sup> September, 2020 (4.00-6.00 pm)**, the session was attended by 18 students; **8<sup>th</sup> September, 2020 (3.30-6.30 pm)** by 16 students and **10<sup>th</sup> September, 2020 (2.00- 4.00 pm)** by 29 students. The attendees were students of T.Y.B.Sc. Microbiology, T.Y.B.Sc. Biotechnology, S.Y.B.Sc. Microbiology, S.Y.B.Sc. Biotechnology and, S.Y.B.Sc. Biochemistry. Dr. Jayashree Pawar, Dr. Kalpita Mulye, Ms. Zahera Momin and Ms. Sayali Daptardar were involved in organizing the sessions.

At the end of the session feedback of students was taken. Students shared that the session was well organized and it inspired them for solving questions of competitive exams. Students commented that the session was interactive and it helped them in brushing up the basic concepts and encouraged them to learn more. All of them showed keen interest in attending such sessions in future and were eager to recommend the session to others.

**VPM's B. N. Bandodkar College Of Science (Autonomous)**  
**Department Of Biotechnology And Microbiology**  
**Competitive Examination Question Paper Solving Session**  
**Activity Report**

**Date: 27<sup>th</sup> February 2021**

**No. of Attendees: 13**

Department of Biotechnology and Microbiology has been regularly involved in providing guidance to students regarding preparation for competitive exams of renowned research Institutions that admit students to post-graduation and integrated Ph. D. courses in these Institutes.

The department had organized online question paper solving session by department alumnus **Ms. Chinmayee Shukla on Saturday, 27<sup>th</sup> February 2021 at 4 pm.** Ms. Chinmayee, who had cleared JNU examination in 2016 (AIR 210) to join M. S. University of Baroda for masters course is **currently pursuing Ph. D. at IIT Gandhinagar.** Dr. Jayashree Pawar, Coordinator, Biotechnology, introduced Ms. Chinmayee to the students and started the session. Ms. Chinmayee began the session, sharing important tips while preparing for the exams and solving the question papers. She then solved few representative questions from JNUEE exam papers with the students for them to understand how to apply basic concepts and logical thinking. Towards the end of the session, she answered to queries by students. Ms. Judith Talker, assistant Prof., Department of Biotechnology and Microbiology, concluded the session.

**Thirteen students of microbiology and Biotechnology attended the session.** Students feedback about the session on a five point scale was as follows: Content of the session (4.46), knowledge gained (4.53), organization of the session (4.53) and **overall rating (4.69).**

## Competitive Exams Experience Sharing Session

The Department of Biotechnology and Microbiology had organised an interactive session on competitive exam preparation by four meritorious alumni students on 12th March 2021 at 4pm. The session was conducted by Ms. Sae Jishi, Ms. Himadri Kale, Ms. Manali Neman and Ms. Komal Gavas who graduated in Microbiology in 2019-20. Komal, Himadri and Manali are pursuing their masters in Marine Biotechnology from Goa University, whereas Sae is now a student of Masters in Medical Biotechnology in M. S. University, Baroda after clearing their entrance examination. All of them cleared Gat-B in 2020 with All India good ranks. Due to the current scenario of Covid pandemic, the session was organized on Microsoft Teams online platform.

The session started with Komal and Himadri sharing their journey of three years in the department. Recollecting the memories of their first year, they emphasized on how participating in various events including Microbio-Olympiad raised their self-confidence. They talked about their experience of volunteering for departmental fest, participating in departmental journal and movie club, and the technical workshops (such as molecular biology workshops) organised by the department.

Manali shared the experience of the research project they did in college under the guidance of in-charges Dr. Kalpita Mulye and Dr. Jayashree Pawar. She specially mentioned that, the learning that they had through the overall process of research project, the techniques handled and presentation of work in competitions was an enriching experience.

Sae Jishi mentioned various entrance/ competitive exams and shared the way she and her group prepared for these exams. All four, spoke about their current courses. The session received an enthusiastic response from students through the questions they asked. All four speakers responded to the questions with the same zeal.

The session was attended by 140 students from different departments of B. N. Bandodkar College. Feedback for the session was taken using google forms. Filled forms were received from 84 participants. In addition to the gradient format for feedback, students were also asked to post comments, where most of them mentioned that the session was really helpful, inspiring and more such sessions would be welcome in future.



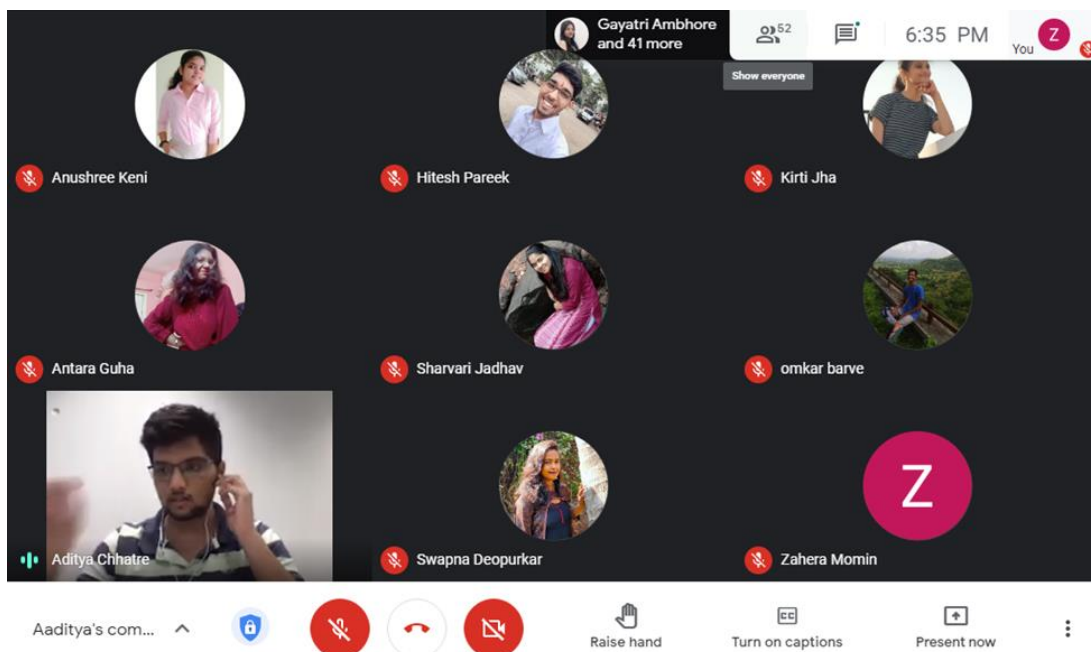


**VPM's B. N. Bandodkar College of Science(Autonomous)**  
**Department of Biotechnology and Microbiology**  
**Webinar on competitive examination guidance: SOP Writing**  
**Activity Report**

The Department of Biotechnology and Microbiology had organized **session on writing “Statement of Purpose (SOP)”** on 22<sup>nd</sup> March 2021 at 6.30pm on google meet platform. The session was organized **specially to guide those students who have cleared written exams TIFR, IIT-JAM and GATE-BT and to write SOP and appear for interviews.** However the session was open to all the students who were intrigued. The session was conducted by our alumnus, **Mr. Aditya Chhatre, Ph.D. Scholar, Max Planck institute of Molecular Cell Biology and Genetics, Dresden Germany.**

Mr. Chhatre guided the students **on correct submission of the TIFR application form.** He Also motivated the students to discover their niche in field of study and try to accomplish certain value addition activities. He also urged the students to **focus on their communication skills** so that they would be capable of organizing their thoughts and expressing it- an important skill of a researcher. Mr. Chhatre also discussed the several **intricacies of SOP writing and explained the same to students using examples.** He also expressed the willingness to further help the students who have cleared competitive exams with their SOP writing.

The session was **attended by 52 students** from departments of Biotechnology, Biochemistry and Microbiology of B. N. Bandodkar College. Feedback for the session was taken using google forms. Filled forms were received from 26 participants. The students commended the excellent overall organization of the event and cognizance of SOP delivered during the talk. They also mentioned that the session was really interesting, informative and that they anticipate attending



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**VPM's B.N.Bandodkar College of Science (Autonomous), Thane**

**Report of**

**Motivational Lecture Series 2020-2021**

**Topic - Build Your Career**

**Date:** 13th August, 2020

**Name of the department conducting event:** Department of Botany, VPM's B. N. Bandodkar College of Science (Autonomous), Thane

**Class & Number of participants – S. Y. B. Sc (33) + T. Y. B. Sc. (16) = Total 49**

**Number of teachers - Nil**

**Resource person:** Dr. Urmila Kumavat, Asst. Professor, Department of Botany, VPM's B. N. Bandodkar College of Science (Autonomous), Thane

**Platform:** Google meet

As a part of the Motivational Lecture Series, a lecture on the topic of **Build Your Career** was taken. This lecture was intended to provide insights regarding self analysis and development of one's own future plans irrespective of peer pressure of colleagues. The talk began with discussion about ideal expectations from a bright career and definition of success. Students were briefly introduced to '**Maslow's hierarchy of needs**' which gave an excellent platform to proceed with detailing of 'Self analysis by SWOC (Strength, Weakness, Opportunities, Challenges)'. Students were explained to develop essential qualities by investing time, effort and energy. They were asked to realize their own physical, mental, intellectual and financial potential which can be utilized for creating a better career. They were appealed to implement their strength in a positive way, to overcome weaknesses, to identify opportunities and to accept challenges with great deal of courage and enthusiasm. They were also guided about maintaining physical health, enhancing IQ-EQ, self discipline, time management and professional skills which form the essence of a bright career. This session was a real 'Eye-Opener' for all students and they all participated enthusiastically in it.

**Outcomes:**

- The session was useful in understanding 'How to do Self SWOC Analysis?'
- They got to know about their own strengths, weaknesses, opportunities and challenges which formed the basis for future plans.
- Students were benefited in many ways which can direct them to think rationally while taking initial steps in career building

**DEPARTMENT OF BIOTECHNOLOGY AND MICROBIOLOGY**  
**COMPETITIVE EXAMINATION QUESTION PAPER SOLVING SESSIONS**  
**BY DEPARTMENT ALUMNI**

Department of Biotechnology and Microbiology has been instrumental in providing guidance to students regarding preparation for competitive exams by renowned research Institutions. After the career guidance webinar conducted by the department in July 2020, there was request from students of different classes for competitive exam question paper solving sessions, also mentioned in the feedback forms. The department has responded to the request by organizing online question paper solving sessions by department alumni who have cleared these examinations. Forty-five students of Biotechnology and Microbiology have registered for these sessions.

The first online session of the activity was organized on **9<sup>th</sup> August 2020 at 2 pm IST**. Mr. Aditya Chhatre who has completed his M.Sc. (Res) from TIFR Mumbai and is pursuing Ph. D. at the Max Planck Research School for Cell, Developmental and Systems Biology, Germany, solved 2010 TIFR question paper along with the students. He also guided the students to approach the problems by thinking logically.

**Thirty-seven students attended the session.** Dr. Jayashree Pawar and Dr. Kalpita Mulye were involved in organizing the same.