



Vidya Prasarak Mandal's

**B. N. BANDODKAR COLLEGE OF SCIENCE**  
**AUTONOMOUS**

**Minutes of the Meeting**  
**Board of Studies**  
**Department of Biotechnology**

**Date: 31<sup>th</sup> March 2022**

**Online Platform: Google Meet**

**Time: 3:30 pm**

**Attendees: 13**

**Details of the attendees:**

Sr. No	Name	Capacity	Affiliation
1.	Dr. Jayashree Pawar	Chairperson	Co-ordinator, Department of Biotechnology, BNBCS
2.	Dr. Varsha Kelkar Mane	Expert nominated by Vice Chancellor	Associate professor, Department of Biotechnology, University of Mumbai
3.	Dr. Ajit Datar	Representative from Industry/ Corporate sector/ Placement	Advisor, Shimadzu Analytical India Pvt. Ltd., Mumbai
4.	Prof. Rekha Singhal	Subject Expert	Professor, Dept. of Food Engineering and Technology, ICT, Mumbai.
5.	Mr. Amit Jethwa	Subject Expert	Assistant professor, Department of Biotechnology, S.K. Somaiya College. Constituent college Somaiya Vidyavihar University
6.	Mr. Nikhil Pahelkar	Post graduate meritorious alumnus	M.Sc., IIT; pursuing Ph.D., IISC
7.	Dr. Kalpita Mulye	Member	Incharge, Department of Microbiology, BNBCS
8.	Ms. Sayali Daptardar	Member	Assistant professor, Department of Microbiology, BNBCS
9.	Ms. Zahera Momin	Member	Assistant professor, Department of Microbiology, BNBCS
10.	Ms. Purvi Shah	Member	Assistant professor, Department of Biotechnology, BNBCS
11.	Dr. Ashwini Tilak	Member	Assistant professor, Department of Biotechnology, BNBCS
12.	Ms. Judith Talkar	Member	Assistant professor, Department of Biotechnology, BNBCS
13.	Ms. M.D. Kushwaha	Member	Assistant professor, Department of Biotechnology, BNBCS

1. **Chairperson:** Dr. Jayashree Pawar, Head, Department of Biotechnology, presided over the meeting.
2. **Welcome:** The Chairperson welcomed all the BOS members constituted in accordance with the UGC guidelines for Autonomous colleges, Uniform Statue No.158 (Statues framed under Section 72(10) of the Maharashtra Public Universities Act, 2016) and Govt. of Maharashtra, Higher and Technical Education Department Notification of 14/01/2019. Self-introduction was given by all the internal BOS members of the Department of Biotechnology to the external BOS members.
3. **Introduction of External BOS members:** Ms. Purvi Shah gave a brief introduction of all the external members of BOS. Prof. Rekha Singhal, Head, Food Engineering and Technology, Institute of Technology, Mumbai, Representative from another University, though joined for the meeting, had to disconnect during the first few minutes due to some urgent work at her end. A copy of the syllabus has been shared with Prof. Singhal.
4. **Summary of Previous meeting:** The Chairperson briefly summarized the points discussed in the previous meeting of BOS held on 28<sup>th</sup> April 2021.
5. **Proposal of the Syllabus & Examination pattern:** Dr. Jayashree Pawar gave a comparative overview of University syllabus and Proposed syllabus of S.Y.B.Sc. Biotechnology. She shed light on the changes made in the proposed syllabus keeping in mind the gradual flow of basics to advanced knowledge during the three years of Bachelor programme. She mentioned the proposed changes in examination to the 60:40 pattern in continuation with the first-year examination pattern.
6. **Suggestions from the Experts:** The forum was open for discussions and suggestions from the experts in the committee. The academic experts admired the endeavors for framing the syllabus and gave some valuable suggestions with respect to the changed syllabus, which are as follows:

**By Dr. Varsha Kelkar:** Dr Varsha appreciated the efforts made to frame the syllabus of S.Y.B.Sc. Biotechnology and asked to share if any new references for the topics covered in the syllabus. She also seconded the suggestions given by Mr. Amit Jethwa.

**By Dr. Ajit Datar:**

1. Properties like Absorption, scattering and diffraction can be added in Unit I of BNBUSBT3T1.
2. Include the examples from enzyme kinetics in spectroscopy applications, and a practical based on the same in the concerned Practical paper.
3. In the unit II of the same paper, the fluid dynamics section can include significance with reference to different synthetic body parts/organs, contact lenses etc and their interaction with biological fluids.
4. For BNBUSBT4T2: the TLC part can be retained in theory as well as practical since a TLC fingerprint is very essential for natural products and is easy to perform in a college

laboratory. (Practical on TLC would be covered in the Third Year Biotechnology syllabus, as informed by the Chairperson to BOS).

5. Include the other applications of pesticides, color development and fuels in Natural Product Chemistry. A practical on the determination of antioxidant properties (activity) of natural products (DPPH) can be included in the concerned practical paper. (This topic would be covered in the Third Year Biotechnology syllabus, as informed by the Chairperson to BOS).
6. Visit to winery

**By Mr. Amit Jethwa:**

1. Genetic defects part in the unit I of Applied Chemistry-I (BNBUSBT3T2) paper can be either excluded or included in some other unit.
2. The title of BNBUSBT3T4 Unit III can be changed to better justify the content (especially for the topics mapping and pedigree).
3. In BNBUSBT3T5, the post translational modification can be included in Unit I (Translation), to be covered in one lecture if possible. (This topic would be covered in Semester V, as informed by Chairperson Dr. Jayashree to the BOS). Protein folding can be covered in this unit.
4. Unit III (Repair systems) can include Non-homologous end joining (NHEJ) mechanism.
5. Include cell lysis using sonication as a practical only if probe based sonicator facility is available.
6. Include a practical on 'Chloroplast separation by Sucrose gradient' in Semester IV. (This was not included due to exceeding the number of practicals in the concerned paper as informed by the Chairperson to the BOS)
7. NPTEL course syllabi can be referred for the 'Advanced enzymes' unit that is to be covered in the third year Biotechnology syllabus next year, in continuation of the Enzymology unit (BNBUSBT4T4 Unit III)

**By Mr. Nikhil Pahelkar**

1. NMR can be considered to be included in the future syllabus of third year biotechnology.
2. Toll-like receptors can be included in Immunology, if not covered already.

Mr Nikhil also offered help for the experimental set up for probe-based sonication for cell lysis, if required.

It was resolved that all the valuable suggestions given by the experts will be implemented in either this or future syllabus of third year Biotechnology.

7. **Vote of Thanks:** The session was concluded by Vote of Thanks by Dr. Kalpita Mulye.

Place: Thane  
Date: 31<sup>th</sup> March 2022

Chairperson  
Dr. Jayashree Pawar