

**Vivekanand Education Society's
College of Arts, Science & Commerce (Autonomous)**

Minutes of the First BOS meeting (Online) in the subject of Microbiology

Mode: Online

Date : 15th December, 2021

Time : 2.00 p.m to 4.00 p.m

Google Meeting Link and ID: <https://meet.google.com/anh-fupn-rmc>

Or dial +1 262-328-6376 and enter this PIN: 321 446 297#

Agenda for the Meeting:

1. Welcome and Introduction of all the BOS members.
2. To discuss and approve the Syllabus of F.Y.B.Sc. Microbiology course and M.Sc. (Part - I & Part - II) Microbiology courses.
3. To discuss and approve the Scheme of Course Evaluation.
4. To discuss and approve suggested techniques for Internal Evaluation.
5. To discuss and approve Question Paper Pattern (For Theory & Practical).
6. To discuss Methodologies for Innovative Teaching and Evaluation Techniques.
7. To discuss increase in intake capacity in PG course.
8. Any other matter with the permission of the chair.

Following members of BOS attended the meeting

1. Dr. (Mrs.) Santhini S. Nair (**Chairperson & HOD**)
2. Dr. Dona J. Joseph, Dr. Malay Shah, Dr. (Mrs.) Shweta A. Patil, Mr. Suman P. Ganger (**Members, Faculty at the Department of Microbiology, VESASC**)
3. Dr. Debjani Dasgupta (**External Subject Expert Member**)
4. Dr. Purvi Bhatt (**External Subject Expert Member**)
5. Dr. Lolly Jain (**University Nominee**)
6. Dr. Girish Mahajan (**Subject Expert - R&D/ Industry**)
7. Dr. Subhojit Sen (**Alumnus**)

Agenda 1: Welcome and Introduction of all the BOS members.

Dr. (Mrs.) Santhini S.Nair welcomed all the members for the first BOS meeting and thanked all the external members for accepting the invitation to be part of the BOS. She introduced herself and department members and requested the external members to introduce themselves as follows:

- ❖ Dr.Debjani Dasgupta - Director, School of Biotechnology & Bioinformatics, D. Y. Patil Deemed to be University, CBD Belapur
- ❖ Dr. Purvi Bhatt - Associate Professor & HOD, Biological Sciences, Sunandan Divatia School of Science, NMIMS
- ❖ Dr.Girish Mahajan -Senior Vice President, Microbiology Division, HiMedia Laboratories
- ❖ Dr.Lolly Jain - Vice Principal & Associate Professor in Microbiology, K. J. Somaiya College of Science & Commerce (Autonomous)
- ❖ Dr.Subhojit Sen - Ramalingaswami Fellow and Faculty at UM-DAE Centre for Excellence in Basic Sciences, Mumbai University, Kalina

All the external members congratulated the college for the Autonomous status and spoke individually about their own major achievements and areas of interest and expertise.All looked forward to a very positive interaction with the department members.

Agenda 2: To discuss and approve the Syllabus of F.Y.B.Sc. Microbiology course and M.Sc. (Part - I & Part - II) Microbiology courses.

F.Y.B.Sc. Microbiology course Draft syllabus was presented before the entire BOS..

The contents of the FYBSc syllabus were discussed semester wise and paper wise in sequence. The following points/suggestions were put forward by the external members.

- Dr. Subhojit Sen suggested that the topic on Fluorescence microscopy (Sem1 - P2) could include some variations of the technique, so that students would be excited by the latest developments in the field. Dr. [Santhini Nair](#)accepted the suggestion, saying that the variations could be presented in a tabular format.
- Dr. Lolly Jain suggested introducing the term 'Oligotrophy' in nutritional classification of bacteria. The same was accepted and will be incorporated in the final syllabus
- Dr. Subhojit Sen raised a query about whether the concept of biomes would be introduced. It was clarified that the Human microbiome has been included in the

syllabus (Sem1-P2). Further the concept of biomes would be included in the Project Based Learning(PBL) topics.

- Dr. Lolly Jain suggested that in the study of Oligodynamic action of metals in practicals, students could be asked to store water in pots of different metals such as copper, iron, silver etc. for 24 hours, and determine the microbial count before and after storage in order to understand the antimicrobial action of the metal ions. This suggestion will be incorporated in Project based learning.
- Dr. Subhojit Sen suggested that we should introduce students to the concept of experimental controls, and use appropriate controls in all experiments possible.
- Dr. Subhojit Sen suggested that students could test the microflora on their fingertips before and after disinfection, so they can understand the importance of disinfection and washing of hands. The suggestion was welcomed and will be introduced in the practicals.
- Dr. Lolly Jain suggested that the list of experiments in Semester 2 was too long and it would be difficult to cover all of them considering the time available for teaching in the second term. She suggested that certain experiments could be converted to demonstration experiments or shifted to SYBSc. Further, she said that she will go through the syllabus again and help to identify the experiments which could be shifted to the second year.

MSc. (Part I and Part II) Draft Syllabus was presented to the BOS members for approval. Dr. Santhini Nair explained to the BOS members that the department is planning to continue using the current M.Sc. Microbiology syllabus of University of Mumbai, as it has recently been updated by the University with inputs from faculty members of many colleges, including our own. The following queries/suggestions were raised by the BOS members:

- Dr. Purvi Bhatt pointed out that in the MSc Part I syllabus, the topic of 'Proteomics' was covered in both Paper 1(PSMB201) and Paper 3 (PSMB203) of Sem2. Dr.Shweta Patil mentioned that we would review the contents and reported that Paper 1(PSMB201) includes techniques for protein estimation (For e.g - 2D PAGE/MALDI-TOF/Protein Profiling/Protein Microarray etc), whereas Paper 3 (PSMB203) covers topics such as Proteomics and the Proteome, branches and an overview of techniques and challenges and applications. Therefore it was decided to retain the contents as they are.

Agenda 3: To discuss and approve the Scheme of Course Evaluation

The Scheme of Course Evaluation provided in the FBSc and MSc draft syllabi was approved by all the BOS members

Agenda 4: To discuss and approve suggested techniques for Internal Evaluation.

The scheme of internal assessment for theory was presented to BOS members, which was approved by the BOS members. For UG classes the internal assessment would be 25% (i.e. 75:25 for external : internal exams) , whereas for PG classes the internal assessment would be 40% (i.e. 60:40 for external : internal exams).

Dr. Lolly Jain suggested that internal assessment could be introduced in practicals too, wherein certain practicals could be assessed during the regular practical sessions. This suggestion was welcomed by all and if this was permitted at the Academic council it would be implemented.

Agenda 5: To discuss and approve Question Paper Pattern (For Theory & Practical)

The question paper pattern for the semester end examination was presented. Dr. Subhojit Sen raised a query regarding the weightage given to MCQ type questions in the paper. Dr. Dona Joseph clarified that MCQs would be included in the Objective type questions, which would have 20% weightage in the paper. The paper pattern was approved by all the BOS members. The Practical examination pattern was also approved by the BOS members without any changes.

Agenda 6: To discuss Methodologies for Innovative Teaching and Evaluation Techniques.

As a part of innovative teaching, Project based learning (PBL) was proposed and presented to the BOS members. All the members appreciated the idea of PBL. Dr. Debjani also commented that PBL was very popular with the younger students at her institute.

Agenda 7: To discuss increase in intake capacity in PG course.

Dr.Santhini Nair expressed that the college wishes to increase the intake capacity of students for MSc (by papers) from 10 seats to 30 seats. This was agreed by all the members present, provided the college can facilitate and improve the infrastructure for the enhanced intake. Dr.Santhini Nair mentioned that the College management is already having plans for improving the infrastructure and facilities.

Agenda 8: Any other matter with the permission of the chair.

- Dr.Purvi Bhatt wanted to confirm if Cell Based Culture Assays were included in the PG syllabus . It was clarified that the MTT Assay, Neutral red assay, Trypan Blue and Almar Blue assays are included in the syllabi.
- Dr. Sen suggested that in accordance with NEP 2020, interactions with other stakeholders could be included through guest lectures or site visits.
- Dr. Shweta Patil asked whether online courses such as those offered by Coursera could be included in internal assessment. Dr. Sen said that the learning done by the students through such courses would have to be evaluated by the college before giving credits. He said that research students of his institute do opt for online courses on topics such as the Python programming language since it helps them in data analysis, but these students were evaluated by the institute to assess their learning.
- Dr. Lolly Jain suggested that in Additional credits for FY students, advanced learners and slow learners could be identified, and sorted into mixed groups, in order to facilitate peer to peer learning.

The meeting ended on a positive note with the chairperson thanking all the members for their valuable inputs and suggestions.