

Anekant Education Society's

# Tuljaram Chaturchand College of Arts, Science, Commerce, Baramati

(Autonomous)

## DEPARTMENT OF MICROBIOLOGY

(Faculty of Science and Technology)

# Minutes of Board of Studies Meeting No.2

**Date of Meeting: 15/05/2020** 

Venue: Department of Microbiology

May, 2020

Department of MicrobiologyAES's T. C. College of ASC, Baramati, (Autonomous)



# Anckant Education Society's TuljaramChaturchandCollege,Baramati Department of Microbiology

#### NOTICE

Date: - 01/05/2020

A meeting of BOS members of Microbiology is scheduled on 15th May. 2020 at 11.30 am onwards. All BOS members are requested to attend the meeting.

#### The agenda of meeting is as follows.

- 5. To confirm the minutes of the previous meeting held on 05/04/2019.
- 6. To design the syllabus of S.Y.B.Sc.(2019 pattern).
- To design the syllabus of M.Sc. Part-II (2019 pattern).
- To discuss and incorporate the relevant feedbacks of the stakeholders (Students, Teachers, Parents, alumni, and employers) in the curriculum.
- 9. Any other matter with the permission of the chair.

Yours faithfully

Dr.S.T.Pawar Chairman BOS in Microbiology. Anekant Education Society's

## Tuljaram Chaturchand College, Baramati

(Autonomous)

# **Department of Microbiology**

# AGENDA OF THE MEETING

#### The agenda of the meeting included the following subjects:

- 1. To confirm the minutes of the previous meeting held on 05/04/2019.
- 2. To design the syllabus of S.Y.B.Sc.(2019 pattern).
- 3. To design the syllabus of M.Sc. Part-II (2019 pattern).
- To discuss and incorporate the relevan feedbacks of the stakeholders (Students, Teachers, Parents, alumni, and employers) in the curriculum.
- 5. Any other matter with the permission of the chair.

#### List of Members Present for the BOS Meeting

The following internal and external BOS members has attended the Board of Studies (Microbiology) meeting held on 15th May, 2020.

| Sr.No. | Name of Member  | Designation |
|--------|---|-------------|
| 1.     | Dr. Sunil Pawar Associate Professor, Department of Microbiology, T. C. College, Baramati.       | Chairman    |
| 2.     | Dr. Milind Gajbhiye Associate Professor, Department of Microbiology, T. C. College, Baramati.   | Member      |
| 3.     | Dr. Mrs. Yogini Mulay Associate Professor, Department of Microbiology, T. C. College, Baramati. | Member      |
| 4.     | Mr. Dhaval Doshi Assistant Professor, Department of Microbiology, T. C. College, Baramati.      | Member      |
| 5.     | Ms. Komal Jagtap Assistant Professor, Department of Microbiology, T. C. College, Baramati.      | Member      |
| 6.     | Ms. Sumaiya Mulani Assistant Professor, Department of Microbiology, T. C. College, Baramati.    | Member      |
| 7.     | Ms. Sheetal Owal Assistant Professor, Department of Microbiology, T. C. College, Baramati.      | Member      |
| 8.     | Mr. Avinash Kalumbe Assistant Professor, Department of Microbiology, T. C. College, Baramati.   | Member      |

#### MINUTES OF THE MEETING

Concerning the Notice dated 01/05/2020, issued by the college, the meeting of Board of Studies in Microbiology was held on 15th May, 2020at 11:30 am in the Department of Microbiology, T. C. College, Baramati. The meeting was conducted adhering to the guidelines and protocols set by the college. Dr.Sunil Pawar, Chairman of the BoS in Microbiology, welcomed all the members followed by introductory words considering the objectives of the meeting.

The issues concerning the agenda of the meeting were discussed considering the suggestions received through online mode from Dr. Pravin Puranik (Professor, School of Life Sciences, North Maharashtra University, Jalgaon; Expert from other University), Dr. Rajashree Patwardhan (Associate Professor, H.V. Desai College, Pune) and Mr. Vipul Nilkant. The details of agenda-wise discussion of the meeting are shown below.

#### 1. To confirm the minutes of the BOS meeting held on 5th April 2019.

Dr. M. H. Gajbhiye read the minutes of the BOS meeting held on 5th April June 2019 and put forward to the BOS members for the approval.

Resolution No. 1: The minutes of the previous Board of Studies meeting were approved and confirmed.

#### 2. To design the syllabus for S. Y. B. Sc. Sem-III & IV (2019 Pattern).

Preliminary draft of syllabus of S.Y.BSc Sem-III-MICRO2301: Bacterial Systematics and Physiology (Theory), MICRO2302: Industrial and Soil Microbiology, MICRO2303 (Practical course) and Sem-IV- MICRO2401: Air and Water Microbiology, MICRO2402: Bacterial Genetics and MICRO2403: Practical course was prepared by Dr.S.T.Pawar, Dr.Y.R.Mulay, Dr.M.H.Gajbhiye, Miss.S.P.Owal.This preliminary draft. This syllabus was sent by E-mail to all the members of BoS, fifteen days before the scheduled BoS meeting.

The syllabus was discussed meticulously and the syllabus of the following courses was finalized as shown below.

#### Course structure for S.Y.B.Sc Microbiology Sem-III & IV (2019 Pattern)

| Class     | Pattern | Semester | Course Code | CourseTitle                          | Course<br>Type | Number<br>of<br>Credits |
|-----------|---------|----------|-------------|--------------------------------------|----------------|-------------------------|
| S.Y.B.Sc. | 2019    | III      | MICRO2301   | Bacterial Systematics and Physiology | Theory         | 2                       |
| S.Y.B.Sc. | 2019    | Ш        | MICRO2302   | Industrial and Soil<br>Microbiology  | Theory         | 2                       |
| S.Y.B.Sc. | 2019    | III      | MICRO2303   | Practical course                     | Practical      | 2                       |
| S.Y.B.Sc. |         | IV       | MICRO2401   | Air and Water<br>Microbiology        | Theory         | 2                       |
| S.Y.B.Sc. | 2019    | IV       | MICRO2402   | Bacterial Genetics                   | Theory         | 2                       |
| S.Y.B.Sc. | 2019    | IV       | MICRO2403   | Practical course                     | Practical      | 2                       |
| 5. 1.D.SC | 2017    | 11       | Microsio    |                                      |                | Total= 12               |

**Resolution No.2:** Thesyllabus and academic framework of S.Y.B.Sc.(2019 Pattern) has been unanimously approved by all members of the BOS.

# 3. To design the syllabus for M. Sc. Part II Sem-III & IV (2019 Pattern).

Basic Draft of Syllabus of M.Sc-II Sem-III-MICRO 5301 Immunology, MICRO 5302Molecular biology MICRO 5303 Industrial waste water treatment, MICRO 5304Biophysical Techniques and related practical's, as well as Sem IV theory courses including MICRO 5401 Pharmaceutical Microbiology, MICRO 5402 Molecular biology II, MICRO5403 Microbial Technology, MICRO 5404 Medical microbiology, was prepared by Mr. Dhawal Doshi, Mrs. Komal Jagtap, Mrs. Summaiya Mulani, Mr. Avinash Kalumbe, Dr.S.T.Pawar, Dr.Y.R.Mulay, Dr.M.H.Gajbhiye and Miss.S.P.Owal and presented before the members. This syllabus was sent by E-mail to all the members of BoS, fifteen days before the scheduled BoS meeting.

Following are the suggestions and comments received from BoS members through E-mails on M.Sc. II Microbiology syllabus:

By Dr. P. R. Puranik

Comments: I have seen the proposed syllabus for MSc II (Microbiology) Sem III and IV.

I did not find any significant lacunae in the syllabus. Both syllabi were found designed appropriately. In my opinion both syllabi shall be accepted by college authorities to be brought them in force from the year 2020-21.

#### By Dr. Rajashree Patwardhan

I have studied Course Structure for M.Sc. -II: Microbiology. This programme would be able to give the students, basic training on various aspects of Microbiology. As one of the BOS members my comments about the syllabus are as follows.

- □ With the introduction of credit-based semester and grading system and continuous evaluation consisting of components of Internal Assessment and External Assessment, the syllabus for Microbiology has been formed for M.Sc. Semester II by your Tuljaram Chaturchand College, Of Arts, Science & Commerce Baramati (Autonomous Institute) to be implemented with effect from 2020-21.
- □ Sem-III theory courses including MICRO 5301 Immunology, MICRO 5302Molecular biology MICRO 5303 Industrial waste water treatment, MICRO 5304Biophysical Techniques and related practical's as well as Sem-IV theory courses including MICRO 5401 Pharmaceutical Microbiology, MICRO 5402 Molecular biology II, MICRO5403 Microbial Technology, MICRO 5404 Medical microbiology will enable the students to understand theoretical foundations and practical techniques required in the respective subjects.
- □ To assist students in developing research skills in general and in specific area of their interest/ specialization, research proposal and research project component t(dissertation I and II) has been introduced in the revised syllabus. This component plays especially important role and will provide students with an opportunity to conduct independent research in the subject of Microbiology at your own P.G. centre and if the research project demands, in conjunction with relevant industries/ research institutes. A dissertation demonstrates that a student can identify his or her own area of interest; able to explore a subject in depth; manage a research project; define a suitable question and use the appropriate research tools.
- ☐ M.Sc. Microbiology students can undertake scientific research in industries, government research laboratories, and hospital laboratories or in university research divisions. They are employed in research organisations in various capacities like research scientists, scientific laboratory technicians, toxicologists, and health care scientists. In pharmaceutical, food,

Neverage and chemical industries, microbiologists play important roles as quality control and assurance specialists, food and water quality scientists, production research officers, gehnical brewers, ecologists, scientific writers, and content developers.

- This M. Sc. II programme will enable graduate students to pursue doctoral studies or professional employment, through imparting in depth knowledge in specific domains of Microbiology along with independent research dissertation to harness the flair of research.
- In synchronization of modern trends and demands from the industry, the syllabus of this course is designed and revised accordingly.

All the BoS members discussed the syllabus throughout and approved it after the inclusion of appropriate comments. Also, the students' feedback was collected, and appropriate suggestions were incorporated in the syllabus.

The syllabus was discussed meticulously, and the syllabus of the following courses was finalized as shown below.

# Course structure for M.Sc-II Sem-III & IV (2019 pattern)

| Cl    | Pattern | Semester | Course    | Course Title   | Course<br>Type | No. of<br>Credits |
|-------|---------|----------|-----------|--|----------------|-------------------|
| Class | Pattern |          | Code      | Immunology   | Theory         | 4                 |
| M.Sc. | 2019    | III      | MICRO5301 | Molecular Biology I  | Theory         | 4                 |
| M.Sc. | 2019    | III      | MICRO5302 | Industrial Waste Water   |                | 4                 |
| M.Sc. | 2019    | III      | MICRO5303 | Treatment  | Theory         |                   |
| 1/6   | 2019    | III      | MICRO5304 | Biophysical Techniques   | Theory         | 4                 |
| M.Sc. | 2019    | III      | MICRO5305 | Practical Course: Practical course based on Immunology, Pharmaceutical Microbiology and Industrial waste water treatment | Practical      | 4                 |
| M.Sc. | 2019    | III      | MICRO5306 | Practical Course: Practical course based on Molecular Biology (I and II) and Microbial Technology                        | Practical      | 4                 |
| M.Sc. | 2019    | III      | CC029     | Certificate Course:<br>Research Methodology  |                | 2                 |
| M.Sc. | 2019    | III      | SD23      | Skill Development:<br>Spectroscopic<br>Techniques  |                | 2                 |
| M.Sc. | 2019    | IV       | MICRO5401 | Pharmaceutical   | Theory         | 4                 |

| M.Sc.<br>M.Sc.<br>M.Sc.<br>M.Sc. | 2019<br>2019<br>2019<br>2019<br>2019<br>2019 | IV<br>IV<br>IV<br>IV<br>IV | MICRO5402<br>MICRO5403<br>MICRO5404<br>MICRO5405<br>MICRO5406 | Microbial Technology  Medical Microbiology | Theory Theory Theory Project Project | 4<br>4<br>4<br>4<br>4<br>4 |
|----------------------------------|--|----------------------------|---|--|--------------------------------------|----------------------------|
|                                  |  |                            |   | Techniques                                 |                                      | 2                          |

Resolution No. 3: The curriculum for M.Sc.-II (2019pattern)has been unanimously approved

- 4. To discuss and incorporate the relevant feedbacks of the stakeholders (Students, Teachers, Parents, alumni, and employers) in the curriculum.
- > Feedback received for the syllabus of S.Y.B.Sc-II Sem IV (2022 Pattern).

From Student: Students appreciated the focused topics, such as Bacterial Systematics, Industrial and Soil Microbiology, Air and Water Microbiology, and Bacterial Genetics. The inclusion of practical courses could offer hands-on experience.

From Teacher: Teachers found the syllabus concise and focused, allowing for indepth coverage of specific topics. The inclusion of practical courses could facilitate active learning.

From Parent: Parents focused on nature of the syllabus as a potential strength, allowing students to delve deeply into specific areas of microbiology. Practical courses could be viewed as essential for skill development.

From Alumni: Alumni appreciated the specialized nature of the courses, potentially aligning with specific career paths. Practical courses could be seen as valuable for real-world application.

From Employer: Employers valued the focused topics, as they align with specific areas of microbiology relevant to industries. Practical experience gained through the courses could be seen as an asset.

> Feedback received for the syllabus of M.Sc-II Sem-III & IV (2019 pattern).

Student: The comprehensive coverage of topics, including Immunology, Molecular Biology, Industrial Waste Water Treatment, Pharmaceutical Microbiology, and Microbial Technology. Practical courses and skill development components could

Teacher: The syllabus well-structured, covering key areas in microbiology. The inclusion of practical courses and skill development components aligns with hands-on teaching methodologies.

Parent: The diverse range of topics and practical components as valuable for their child's academic and career development. The inclusion of a certificate course and skill development modules could be seen as a positive aspect.

Alumni: Alumni appreciated the practical exposure gained through the dissertation and practical courses, preparing them for real-world applications. The inclusion of skill development courses could be seen as beneficial for career advancement.

Employer: Employers valued the practical skills gained through the dissertation, practical courses, and skill development components. The broad range of theoretical subjects could prepare graduates for diverse roles in the industry.

Resolution No. 4: Feedback was collected by the entire stakeholder &was incorporated in the syllabus.

The meeting of BOS concluded with the vote of thanks by Prof. M. H. Gajbhiye.

READ Department of Microbiology Tuljaram Chaturchand College Buramati. Dist. Poona

Coordinator Internal Quality Assurance Cell Tuljaram Chaturchand College Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati (Pune)-413102

Principal Baramati