

**J.J. College of Arts and Science (Autonomous)**  
**J.J. Nagar, Sivapuram Post, Pudukkottai – 622 422**  
**(Re-Accredited by NAAC – 4<sup>th</sup> Cycle)**  
**Affiliated to Bharathidasan University, Tiruchirappalli**

**PG and Research Department of Microbiology**

**Minutes of the Board of Studies Meeting**

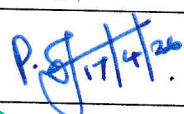
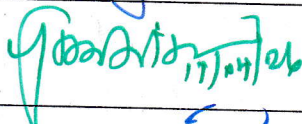
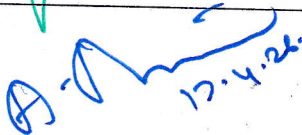
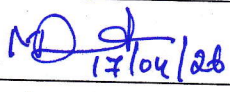
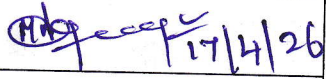
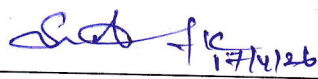
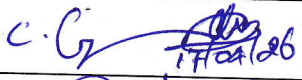
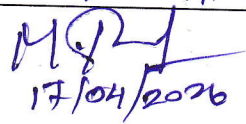
**Meeting No: 10**

**Date : 17.04.2026**

**Time : 10.30 a.m.**

The Meeting of the Board of Studies in Microbiology (U.G. and P.G.) was held at 10.30 a.m. on 17.04.2026 (Friday) for the Eight revision of the Curricula for I & II Semesters for the students admitted in 2026 – 2027 onwards.

**Members Present:**

| S.No. | Name                                                                                                                                  | Designation                     | Signature                                                                             |
|-------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|
| 1.    | <b>Dr.P.Jeevan</b><br>Head, Department of Microbiology                                                                                | Chairperson                     |    |
| 2.    | <b>Dr.G.Muralitharan</b><br>Professor, Department of Microbiology,<br>Bharathidasan University, Tiruchirappalli                       | University Nominee              |   |
| 3.    | <b>Dr.A.Arun</b><br>Professor and Head<br>Department of Microbiology<br>Alagappa University, Karaikudi                                | Subject Expert                  |  |
| 4.    | <b>Dr.P.U.Mahalingam</b><br>Professor, Department of Biology<br>The Gandhigram Rural Institute (Deemed<br>to be University), Dindigul | Subject Expert                  | Attended<br>online                                                                    |
| 5.    | <b>Dr.M.Poornima</b><br>Assistant Professor                                                                                           | Member                          |  |
| 6.    | <b>Dr.M.Anjugam</b><br>Assistant Professor                                                                                            | Member                          |  |
| 7.    | <b>Dr.K.Surendirakumar</b><br>Assistant Professor                                                                                     | Member                          |  |
| 8.    | <b>Mr.C.Ganapathy</b><br>Assistant Professor                                                                                          | Member                          |  |
| 9.    | <b>Mr.M.Ramesh</b><br>Assistant Manager, Quality Control<br>E.I.D – Parry (India) Limited<br>Oonaiyur Village, Pudukkottai            | Representative from<br>Industry |  |
| 10.   | <b>Ms.T.Pavithra</b><br>Lab Technician<br>Dr.Adityan Skin and Hair Laser Center,<br>Asoke Nagar, Chennai                              | Alumni                          | Absent                                                                                |

The Chairman, Dr.P.Jeevan chaired the meeting and welcomed all the members to the Tenth BoS Meeting. After the brief introduction, the following resolutions were discussed and passed.

### Resolutions

#### It was resolved

1. To approve the revised UG and PG curriculum, in accordance with the guidelines of UGC-LOCF, NAAC, TANSCHÉ and the Parent University.
2. To approve the Curriculum, Course Structure (Syllabi) and Textbooks recommended for implementation from the academic year 2026-2027 onwards.
3. To approve the General Course Structure for the B.Sc. and M.Sc. Microbiology, along with the syllabi for the first two semesters, were discussed and scrutinized for implementation from the academic year 2026-27 onwards.
4. To approve the following course structure for UG and PG Programmes respectively.

#### Distribution of Courses – UG

| Part               | Semester    | Course                                                         | No. of Courses | Credit                                   | Marks       |
|--------------------|-------------|----------------------------------------------------------------|----------------|------------------------------------------|-------------|
| I                  | 1 - 4       | Language – (Tamil/Hindi/French/Sanskrit)                       | 04             | 12                                       | 400         |
| II                 | 1 - 4       | Language – English                                             | 04             | 12                                       | 400         |
| III                | 1 - 6       | Core Course (Theory)                                           | 15             | 96<br>(CC – 69,<br>AC – 18,<br>DSE – 09) | 2400        |
|                    | 1 - 4       | Allied Course (Theory)                                         | 06             |                                          |             |
|                    | 5 & 6       | Discipline Specific Elective                                   | 03             |                                          |             |
| IV                 | 5           | Internship                                                     | 01             | 02                                       | 100         |
|                    | 3, 4 & 5    | Skill Enhancement Course (SEC)                                 | 03             | 06                                       | 1200        |
|                    | 1 & 2       | Generic Elective Course (IDC)                                  | 02             | 04                                       |             |
|                    | 3, 4, 5 & 6 | Ability Enhancement Compulsory Course (AECC) (EVS, VE, DM, GS) | 04             | 08                                       |             |
|                    | 4 & 5       | Self – Learning Course                                         | 02             | 04                                       |             |
|                    | 6           | Value Added Course                                             | 01             | 02                                       |             |
| V                  | 3           | Health and Wellness                                            | 01             | 01                                       | 100         |
|                    | 6           | Extension Activity                                             | -              | 01                                       | -           |
| <b>Grand Total</b> |             |                                                                | <b>46</b>      | <b>148</b>                               | <b>4600</b> |

### Distribution of Courses – PG

| S.No.              | Semester | Course                                   | No. of Courses | Credit    | Marks       |
|--------------------|----------|------------------------------------------|----------------|-----------|-------------|
| 1.                 | 1 - 4    | Core Courses (Theory & Practical)        | 12             | 60        | 1200        |
| 2.                 | 1 & 2    | Discipline Specific Elective Course      | 03             | 12        | 300         |
| 3.                 | 1 - 3    | Skill Enhancement Course                 | 03             | 09        | 300         |
| 4.                 | 3        | Generic Elective Course                  | 01             | 03        | 100         |
| 5.                 | 4        | Project Work                             | 01             | 07        | 100         |
| 6.                 | 3        | Internship                               | 01             | 02        | 100         |
| 7.                 | 2        | Self – Learning Course                   | 01             | 02        | 100         |
| <b>Grand Total</b> |          |                                          | <b>22</b>      | <b>95</b> | <b>2200</b> |
| 8.                 | 4        | Value Added Course (Extra Credit Course) | 01             | 02        | 100         |

5. To approve the changes made in the curriculum based on the special feedback received from all stake holders on the existing curricula, courses and Syllabi.
6. To adopt the revised Bloom's Taxonomy in framing the Course Outcomes.
7. To approve the newly incorporated guidelines on Curriculum Design prescribed by NAAC.
  - a. The curriculum framework has been aligned with OBE by defining POs, COs & PEOs/PSOs.
  - b. Generic Open Elective Courses for UG and PG Programmes have been designed in alignment with the CBCS to ensure curriculum flexibility.
  - c. Practical and Industry focused field work/project and Internship Training have been incorporated into the curriculum.
  - d. Skill oriented courses offered by the Departments are aligned with NCrF, NSQF, and NHEQF.
  - e. Greater focus has been given to incorporate components of Indian Knowledge Systems into the curriculum.
  - f. Online courses for UG and PG through SWAYAM / SWAYAM PLUS have been incorporated into the curriculum.
  - g. A relationship matrix mapping for COs, POs and PSOs has been implemented for all courses.
  - h. The Curriculum addresses local, regional, national and global needs.
  - i. Courses focus on Employability, Entrepreneurship and Skill Development.
  - j. Courses also emphasize Gender, Environment and Sustainability, Human Values and Professional Ethics.

8. To approve the inclusion of a self-learning course from **SWAYAM / SWAYAM PLUS** for the **UG programme** in the **4<sup>th</sup> semester**, carrying two credits and 100 marks, and a subject related self-learning course offered by the department in the 5<sup>th</sup> Semester also carrying two credits and 100 marks.
9. To approve that, in the fourth semester, if a student is unable to complete the SWAYAM course, the student shall be permitted to take an optional course offered by the Department under the self-learning category only in the final semester.
10. To approve the inclusion of self-learning course from **SWAYAM / SWAYAM PLUS** for **PG programme** in the **2<sup>nd</sup> Semester** carrying two credits and 100 marks.
11. To approve the inclusion of **Value Added Course** in the sixth semester for the UG Programme under Part – IV.
12. To approve the Value Added Course to be treated an extra credit course for all PG Programmes. The credit will not be included in CGPA.
13. To approve the new evaluation pattern of **CIA – 30, ESE –70** for both UG and PG programmes as per the guidelines given by UGC and TANSCHÉ on Examination and Evaluation reforms.
14. To approve the following pattern for the calculation of CIA

| UG           |           | PG             |           |
|--------------|-----------|----------------|-----------|
| Category     | Marks     | Category       | Marks     |
| Mid-Semester | 7.5       | Mid-Semester   | 7.5       |
| Model Exam   | 7.5       | Model Exam     | 7.5       |
| Assignment 1 | 05        | Assignment 1   | 05        |
| Assignment 2 | 05        | Assignment 2   | 05        |
| Attendance   | 05        | Quiz / Seminar | 05        |
| <b>Total</b> | <b>30</b> | <b>Total</b>   | <b>30</b> |

15. To approve the following question paper pattern for the **ESE – 70 marks**:

| S. No        | Section  | Marks                                      |
|--------------|----------|--------------------------------------------|
| 1            | Part - A | 10 x1 = 10 (5 MCQ & 5 Fill in the blanks)  |
| 2            | Part - B | 5 x 2 = 10 Marks                           |
| 3            | Part - C | 5x4 = 20 marks (either... or choice/)      |
| 4            | Part - D | 3x10 = 30 marks (Open choice – 3 out of 5) |
| <b>Total</b> |          | <b>70 Marks</b>                            |

16. To approve the following evaluation pattern for the UG & PG project:

| S. No | Description                              | Marks |
|-------|------------------------------------------|-------|
| 1     | Plan of the Project                      | 20    |
| 2     | Logical Execution of the Plan            | 40    |
| 3     | Innovation                               |       |
| 4     | Usage of Modern Tools / Technology       |       |
| 5     | Individual Contribution / Group Activity |       |
| 6     | Project Report                           | 20    |
| 7     | Viva-Voce                                | 20    |
| Total |                                          | 100   |

17. To approve the **internship training** shall be undertaken by UG students during their IV semester summer vacation and by PG students during their II semester summer vacation with a duration of **15 to 21 working days**.
18. To approve the continuance of awarding credits for the internship course to be reflected in the 5<sup>th</sup> Semester mark statement for UG programmes and in the III semester mark statement for PG programmes. The scheme for awarding marks for UG and PG programmes are as follows:

| S. No | Description | Marks |
|-------|-------------|-------|
| 1     | Report      | 50    |
| 2     | Viva Voce   | 50    |
|       | Total       | 100   |

19. To continue to follow the existing evaluation system for the **Health and Wellness Course**

**Scheme of Evaluation:**

| Part  | Description                              | Marks |
|-------|------------------------------------------|-------|
| A     | Report                                   | 40    |
| B     | Attendance                               | 20    |
| C     | Activities (Observation During Practice) | 40    |
| Total |                                          | 100   |

20. To approve the inclusion of **Introduction to Disaster Management** as Ability Enhancement Course in the 5<sup>th</sup> Semester for all UG Programmes.

21. To approve the following system for students who have not studied Tamil under Part – I (Languages).

| <b>Generic Elective Course (IDC) #<br/>For who have Not studied Tamil under Part - I</b>      |                          |                    |
|-----------------------------------------------------------------------------------------------|--------------------------|--------------------|
| Those who have studied Tamil upto 10 <sup>th</sup> , +2 but opt for other languages in degree | 1 <sup>st</sup> Semester | Special Tamil - I  |
|                                                                                               | 2 <sup>nd</sup> Semester | Special Tamil - II |
| Those who have not studied Tamil in School level                                              | 1 <sup>st</sup> Semester | Basic Tamil - I    |
|                                                                                               | 2 <sup>nd</sup> Semester | Basic Tamil – II   |

22. Resolved to have the following **15 Core Courses in the 6 semesters** of UG

| Sl. No.             | Course Code  | Course Name                                | Revised / Renamed / Newly Introduced |
|---------------------|--------------|--------------------------------------------|--------------------------------------|
| <b>Semester I</b>   |              |                                            |                                      |
| 1.                  | U1R4MBCC1    | Fundamentals of Microbiology               | Revised & Renamed                    |
| 2.                  | U1R4MBCC2P   | Major Practical I – Covering CC1           | Revised                              |
| <b>Semester II</b>  |              |                                            |                                      |
| 3.                  | U2R4MBCC3    | Microbial Physiology and Metabolism        | Revised                              |
| 4.                  | U2R4MBCC4P   | Major Practical II - (Covering CC3)        | Revised                              |
| <b>Semester III</b> |              |                                            |                                      |
| 5.                  | U3R4MBCC5    | Immunology                                 | -                                    |
| 6.                  | U3R4MBCC6P   | Major Practical - III (Covering CC5)       | -                                    |
| <b>Semester IV</b>  |              |                                            |                                      |
| 7.                  | U4R4MBCC7    | Medical Microbiology                       | -                                    |
| 8.                  | U4R4MBCC8P   | Major Practical – IV (Covering CC7)        | -                                    |
| <b>Semester V</b>   |              |                                            |                                      |
| 9.                  | U5R4MBCC9    | Food and Dairy Microbiology                | -                                    |
| 10.                 | U5R4MBCC10   | Environmental and Agriculture Microbiology | -                                    |
| 11.                 | U5R4MBCC11   | Microbial Genetics and Molecular Biology   | -                                    |
| 12.                 | U5R4MBCC12P  | Major Practical - V (Covering CC9 & CC10)  | -                                    |
| <b>Semester VI</b>  |              |                                            |                                      |
| 13.                 | U6R4MBCC13   | Industrial Microbiology                    | -                                    |
| 14.                 | U6R4MBCC14P  | Practical – VI (Covering CC11 & CC13)      | -                                    |
| 15.                 | U6R4MBCC15PW | Project Work                               | -                                    |

23. Resolved to have the following **06 Allied Courses in the 1<sup>st</sup> to 4<sup>th</sup> Semesters** for UG

| Sl. No.             | Course Code | Course Name                          | Revised / Renamed / Newly Introduced |
|---------------------|-------------|--------------------------------------|--------------------------------------|
| <b>Semester I</b>   |             |                                      |                                      |
| 1.                  | U1R4MBAC1   | Biochemistry                         | Newly Introduced                     |
| 2.                  | U1R4MBAC2P  | Allied Practical – I (Covering AC1)  | Newly Introduced                     |
| <b>Semester II</b>  |             |                                      |                                      |
| 3.                  | U2R4MBAC3   | Biostatistics                        | Revised                              |
| 4.                  | U2R4MBAC4P  | Allied Practical – II (Covering AC3) | Revised                              |
| <b>Semester III</b> |             |                                      |                                      |
| 5.                  | U3R4MBAC5   | Biotechnology                        | Newly Introduced                     |
| <b>Semester IV</b>  |             |                                      |                                      |
| 6.                  | U4R4MBAC6   | Bioinformatics                       | -                                    |

24. Resolved to have the following **03 Discipline Specific Elective Courses in the 5<sup>th</sup> & 6<sup>th</sup> Semesters** for UG.

| Sl. No.            | Course Code  | Course Name                 | Revised / Renamed / Newly Introduced |
|--------------------|--------------|-----------------------------|--------------------------------------|
| <b>Semester V</b>  |              |                             |                                      |
| 1.                 | U5R4MBDSE1:1 | Bioinstrumentation          | -                                    |
|                    | U5R4MBDSE1:2 | Virology                    | -                                    |
| <b>Semester VI</b> |              |                             |                                      |
| 2.                 | U6R4MBDSE2:1 | Microbial Biotechnology     | -                                    |
|                    | U6R4MBDSE2:2 | Pharmaceutical Microbiology | Newly Introduced                     |
| 3.                 | U6R4MBDSE3:1 | Genetic Engineering         | Newly Introduced                     |
|                    | U6R4MBDSE3:2 | Biosafety and Bioethics     | -                                    |

25. Resolved to have the following **03 Skill Enhancement Courses in the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> Semesters** for UG

| Sl. No.             | Course Code  | Course Name               | Revised / Renamed / Newly Introduced |
|---------------------|--------------|---------------------------|--------------------------------------|
| <b>Semester III</b> |              |                           |                                      |
| 1.                  | U3R4MBSEC1:1 | Vermitechnology           | -                                    |
|                     | U3R4MBSEC1:2 | Microbial Inoculants      | -                                    |
| <b>Semester IV</b>  |              |                           |                                      |
| 2.                  | U4R4MBSEC2:1 | Medical Lab Technology    | -                                    |
|                     | U4R4MBSEC2:2 | Vaccinology               | -                                    |
| <b>Semester V</b>   |              |                           |                                      |
| 3.                  | U5R4MBSEC3:1 | Mushroom Technology       | -                                    |
|                     | U5R4MBSEC3:2 | Good Laboratory Practices | -                                    |

26. Resolved to offer the following **Generic Elective Courses to other Departments** in the 1<sup>st</sup> & 2<sup>nd</sup> Semester.

| Sl. No.            | Course Code | Course Name            | Revised / Renamed / Newly Introduced |
|--------------------|-------------|------------------------|--------------------------------------|
| <b>Semester I</b>  |             |                        |                                      |
| 1.                 | U1R4MBGEC1  | Basics of Microbiology | Newly Introduced                     |
| <b>Semester II</b> |             |                        |                                      |
| 2.                 | U2R4MBGEC2  | Health and Hygiene     | Newly Introduced                     |

27. Resolved to have the following **12 Core Courses in the 4 Semesters of PG.**

| Sl. No.             | Course Code  | Course Name                               | Revised / Renamed / Newly Introduced |
|---------------------|--------------|-------------------------------------------|--------------------------------------|
| <b>Semester I</b>   |              |                                           |                                      |
| 1.                  | P1R4MBCC1    | General Microbiology                      | Revised & Renamed                    |
| 2.                  | P1R4MBCC2    | Microbial Physiology                      | Revised                              |
| 3.                  | P1R4MBCC3P   | Practical I (Covering CC1 & CC2)          | Revised                              |
| <b>Semester II</b>  |              |                                           |                                      |
| 4.                  | P2R4MBCC4    | Clinical Microbiology                     | Revised & Renamed                    |
| 5.                  | P2R4MBCC5    | Immunology & Immunotechnology             | Revised & Renamed                    |
| 6.                  | P2R4MBCC6P   | Practical II (Covering CC4 & CC5)         | Revised                              |
| <b>Semester III</b> |              |                                           |                                      |
| 7.                  | P3R4MBCC7    | Bioprocess Technology                     | -                                    |
| 8.                  | P3R4MBCC8    | Microbial Genetics and Molecular Biology  | -                                    |
| 9.                  | P3R4MBCC9    | Environment and Agricultural Microbiology | -                                    |
| 10.                 | P3R4MBCC10P  | Practical III (Covering CC7, CC8 & CC9)   | -                                    |
| <b>Semester IV</b>  |              |                                           |                                      |
| 11.                 | P4R4MBCC11   | Recombinant DNA Technology                | -                                    |
| 12.                 | P4R4MBCC12   | Research Methodology                      | -                                    |
| 13.                 | P4R4MBCC13PW | Project Work                              | -                                    |

28. Resolved to have the following **03 Discipline Specific Elective Courses in the 1<sup>st</sup> and 2<sup>nd</sup> Semesters for PG**

| Sl. No.            | Course Code  | Course Name                      | Revised / Renamed / Newly Introduced |
|--------------------|--------------|----------------------------------|--------------------------------------|
| <b>Semester I</b>  |              |                                  |                                      |
| 1.                 | P1R4MBDSE1:1 | Advanced Biochemistry            | Revised                              |
|                    | P1R4MBDSE1:2 | Microalgal Technology            | Revised                              |
| 2.                 | P1R4MBDSE2:1 | Analytical Techniques in Biology | Revised & Renamed                    |
|                    | P1R4MBDSE2:2 | Microbial Nanobiotechnology      | Revised                              |
| <b>Semester II</b> |              |                                  |                                      |
| 3.                 | P2R4MBDSE3:1 | Food and Dairy Microbiology      | -                                    |
|                    | P2R4MBDSE3:2 | Biosafety, Bioethics & IPR       | -                                    |

29. Resolved to have the following **03 Skill Enhancement Courses (listed)** in the **1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Semesters** for PG

| Sl. No.             | Course Code  | Course Name                          | Revised / Renamed / Newly Introduced |
|---------------------|--------------|--------------------------------------|--------------------------------------|
| <b>Semester I</b>   |              |                                      |                                      |
| 1.                  | P1R4MBSEC1:1 | AI in Healthcare                     | Newly Introduced                     |
|                     | P1R4MBSEC1:2 | AI in Drug Discovery and Development | Newly Introduced                     |
| <b>Semester II</b>  |              |                                      |                                      |
| 2.                  | P2R4MBSEC2:1 | Diagnostic Microbiology              | Newly Introduced                     |
|                     | P2R4MBSEC2:2 | Quality Control in Industries        | Newly Introduced                     |
| <b>Semester III</b> |              |                                      |                                      |
| 3.                  | P3R4MBSEC3:1 | Bio Business and Entrepreneurship    | Newly Introduced                     |

30. Resolved to offer an Allied Course titled **Fundamentals of Microbiology** for the students of **Department of Biochemistry** in Semester II.

31. Resolve to offer an **Generic Elective Course – Applied Microbiology** in the 3<sup>rd</sup> Semester