

M.Sc. (Micro) Semester - 4 (CBCS) Examination
March/April - 2025 (As Per Syllabus Year June-2019)
Research Methodology, IPR and Biosafety(Core)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Section-I

- Que-1 Explain research components, aim, and objectives with suitable example. (14)
OR
- Que-1 Answer the following
1. Write a note on plagiarism and explain its importance in research.
2. Explain about the graphical data analysis.
- Que-2 Explain the fundamental of the international framework on IPs. (14)
OR
- Que-2 Answer the following
1. Write a note on TradeMark.
2. Write a note on geographical indication.
- Que-3 Answer the following (any seven out of eight) (07)
1. Explain the outline of the review paper.
2. Justify: why hypothesis should be rejected in research?
3. Enlist the the plagiarism tool.
4. Write a brief about types of patents.
5. Define multivariate analysis
6. What is the function of WTO?
7. What is mentee-mentor?
8. Write about provisional patent.

Section-II

- Que-1 Describe the national and international funding agency in R&D and explain its role in institutional development. (14)
OR
- Que-1 Answer the following
1. Explain about scientific research.
2. Explain the types of national research schemes in detail.
- Que-2 What is biosafety? Explain the BSL 2 and 3 in detail. (14)
OR
- Que-2 Answer the following
1. Explain the role of the institutional biosafety committee in the research and development.
2. Write note on risk assessment.
- Que-3 Answer the following (any seven out of eight) (07)
1. Explain the Biosafety level 4 features.
2. Explain the suitable BSL recommended for the *Mycobacterium tuberculosis*.
3. What is RCGM? define its role?
4. Mention the application of GMOs.
5. Explain risk management in brief.
6. Give at least two examples of the international funding agency.
7. What are the review paper and research paper differentiate it.
8. Mention the two names of international funding agencies.
