

M.Sc. (Botany) Semester - 4 (CBCS) Examination
April/May-2023 (NEW COURSE)
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

Q.1 Answer the following. (14)

1. Write a note on mentoring and mentor-mentee responsibility
2. Explain – Multivariate analysis

OR

Q.1 Write a note on how to identify a research problem and what important aspects should be taken for writing a research paper?

Q.2 Answer the following. (14)

1. Protection of New GMO
2. IP as a factor in R & D

OR

Q.2 Explain in detail types of patents and its procedure.

Q.3 Answer the following. (any seven) (07)

1. Give the two examples of plagiarism tools.
2. Define ANOVA and explain its importance in biological sciences.
3. What is geographical indication?
4. Define the term optimization.
5. Discuss the importance of data validation in research
6. Give a full form of WTO and TRIPS.
7. What are the provisions for protection of Traditional Knowledge?
8. Mention the application of GMO in agriculture.

SECTION - II

Q.4 Write a detailed note on role of national and international funding agencies (14)

OR

Q.4 Write short notes on.

1. Research Proposal writing
2. Types of research

Q.5 Discuss in detail 'Biological safety cabinets' with fundamentals of biosafety. (14)

OR

Q.5 Answer the following.

1. Roles of Institutional Biosafety committee
2. Risk analysis

Q.6 Answer the following. (any seven) (07)

1. Define the role of RCGM.
2. Enlist the national and international funding agency.
3. Explain – 'biosafety level for specific microorganisms'
4. Explain the importance of 'Review of literature' in research proposal
5. Give a full form of RCGM and GEAC.
6. Give an example of organisms which handle under BSL-2 facility.
7. Give the names of some primary contaminants
8. What are transgenic plants?
