

2025

M.Sc. 1st Semester Examination

MICROBIOLOGY

Paper : MCBC403X0

(Research Methodology and Ethics)

Full Marks : 50

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *four* questions : 2×4=8

1. Distinguish between method and methodology.
2. Distinguish between inductive and deductive methods.
3. Define 'Concept' with examples.
4. What is a proposition?
5. Define hypothesis.
6. Distinguish between 'data' and 'information'.

P.T.O.

(2)

Group - B

Answer any *four* questions : $4 \times 4 = 16$

7. Give the definition of 'Research Design'.
8. Describe the essentials of a good scientific manuscript.
9. What is meant by relevance of a research design?
10. Compare between basic and applied research.
11. What is meant by 'validity' in research?
12. Distinguish between quantitative and qualitative data.

Group - C

Answer any *two* questions : $8 \times 2 = 16$

13. What are the basic building blocks of research methodology? Describe them with suitable examples.
14. State the characteristic features of quantitative and qualitative data.
15. Prepare a research design by following the different steps.
16. How can quantitative and qualitative data be combined? Explain.

Internal Assessment : 10 marks
