

**M. SC. (HONOURS)  
(BIOCHEMISTRY)  
(MSCBCH)**

**Term-End Examination  
December, 2025**

**MBC-010 : RESEARCH METHODOLOGY**

*Time : 3 Hours*

*Maximum Marks : 100*

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**Note :** Answer any *five* questions. All questions carry equal marks.

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1. (a) What is the meaning of research ?  
Describe the need and purpose of research. 10
  
- (b) Differentiate between the following :  
5+5
  - (i) Basic and Applied Research
  - (ii) Descriptive and Analytical Research

2. Write notes on the following :  $5 \times 4 = 20$
- (a) Deliberate sampling
  - (b) Control and Treatment groups
  - (c) Data Analysis
  - (d) Review of Literature
3. (a) Give an overview of descriptive and analytic research design. 10
- (b) What is data collection ? Describe the types of data. 10
4. How will you write a research paper ? Explain different steps involved in the writing process. 20
5. (a) Explain ethical guidelines in animal research. 10
- (b) What is plagiarism ? How can it be detected ? 10
6. (a) Discuss the need of Institutional Ethics Committee. 10
- (b) Compare biosafety levels 2 and 4. 10

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7. (a) Describe the issues in authorship during publication. 10
- (b) Explain the positive and negative effects of environmental release of GMPs. 10
8. (a) Give an overview of Copyright Act and Copyright Issues. 10
- (b) Explain the different types of patent. What are patent rights ? 10

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