

**M. SC. (ZOOLOGY)  
(MSCZOO)**

**Term-End Examination  
December, 2025**

**MZO-009 : RESEARCH METHODOLOGY**

*Time : 2 Hours*

*Maximum Marks : 50*

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**Note :** (i) Attempt any *five* questions.

(ii) Each question carries 10 marks.

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1. (a) Distinguish between structured and unstructured methods of observation in research. 4
- (b) Discuss the different factors that need to be considered for developing a sample design. 6
2. (a) Mention the desirable qualities that fulfill good research. 4

- (b) How would you define scientific method ?  
Discuss the different steps in scientific  
method. 6
3. (a) Discuss the different forms of  
hypothesis. 5
- (b) Differentiate between prospective and  
retrospective cohort study in research. 5
4. (a) Enumerate the different measures for  
the validity of diagnostic tests. 5
- (b) Distinguish between cluster sampling  
and multistage sampling. 5
5. (a) Elucidate the different issues of  
correlation studies in research. 4
- (b) Describe the different scales of data  
measurement. 6
6. (a) Explain the different types of research  
documents. 5
- (b) Give a broad overview of the purpose  
and technique of detection of plagiarism  
in a scientific article. 5

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7. Write short notes on the following :  $4 \times 2\frac{1}{2} = 10$

- (a) Selection of a research problem
- (b) Informal experimental design
- (c) Importance of research reports
- (d) Scatter diagram

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