

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025

(Regular/Improvement/Supplementary)

BOTANY

**GBOT4B04T: RESEARCH METHODOLOGY, REPRODUCTIVE BOTANY &
PALYNOLOGY**

Time: 2 Hours

Maximum Marks: 60

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 20 marks)**

1. Define Scientific methods.
2. Differentiate between Molarity and Normality.
3. What is meant by Review of Literature.
4. Define pH and mention its importance.
5. Who laid the foundation to descriptive and correlation statistics?
6. Write down any two Journal names with their publisher.
7. What is R_f value? Mention its use.
8. What are the applications of Spectrophotometer?
9. Give the expansion of NCBI. Write down three branches of NCBI.
10. State the basic principle of centrifugation.
11. Comment on Differential centrifugation.
12. Write notes on INFLIBNET.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 30 marks)**

13. Describe the structure and function of wall layers.
14. Briefly explain the preparation of some common buffers used in biological system.
15. Comment on types of observation.
16. Describe the latest methods of presentation.
17. Explain the structure of dicot embryo with neat labelled diagram.
18. What are the rules involved in tabulation?
19. Define Chromatography. Briefly explain the types of chromatography.

SECTION C: Answer any *one* question. The question carries *ten* marks.

20. Write an essay on measures of central tendency with examples.
21. Briefly explain different types of pollination.

(1 × 10 = 10 Marks)