Reg.No

Name:

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2024 (Regular/Improvement/Supplementary) BOTANY GBOT4B04T: RESEARCH METHODOLOGY, REPRODUCTIVE BOTANY & PALYNOLOGY

Time:2Hours

MaximumMarks: 60

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

- 1. What is a buffer? What is its importance
- 2. Which are the various apertural morphoforms of pollen grains?
- 3. State how standard deviation is superior than mean deviation.
- 4. Give the importance of e-Pathsala.
- 5. What is an ogive? State its importance.
- 6. What are the peculiarities of the APA style of citation?
- 7. Differentiate between molarity and normality.
- 8. Which are the various barriers in fertilization?
- 9. Differentiate between Null and Alternate hypotheses.
- 10. Give the significance of spectrophotometry.
- 11. What is megasporogenesis?
- 12. What is molecular sieving? What are its applications?

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

- 13. What is central tendency? What are its different types?
- 14. Explain the various types of centrifuges and their applications.
- 15. Give brief notes on Google Scholar, Sodh Ganga, NCBI and Inflibnet.
- 16. Describe the various types of embryo sac development.
- 17. What is Chromatography? Discuss the different types of Chromatographictechniques.
- 18. What is Palynology? Explain the role of pollen grains in taxonomical studies.
- 19. What is Chi-Square test? How is it calculated? What are its applications?

SECTION C: Answer any one question. Each carries ten marks.

- 20. Explain the important steps involved in scientific methods. How it forms the structure of a research report?
- 21. Describe the various measures of dispersion and their applications.