Reg. No

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2025 SEMESTER 6 : BOTANY

COURSE : 19U6CRBOT10 : PERSPECTIVES OF SCIENCE, METHODOLOGY AND GENERAL INFORMATICS

(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)

Time : Three Hours

Max. Marks: 60

 $(1 \times 8 = 8)$

25U625

PART A

Answer All (1 mark each)

- 1. Write short key for underline and find.
- 2. What is the SI unit of pressure?
- 3. What is median?
- 4. Write Beer-Lambert's Law.
- 5. Write briefly about normal distribution.
- 6. What is the primary objective of Descriptive Research?
- 7. What is pH paper?
- 8. What is DNAi?

PART B

Answer any 6 (2 marks each)

- 9. Explain briefly about Science Direct as academic search engine.
- 10. Differentiate between dependent and independent variables.
- 11. Differentiate primary and secondary research.
- 12. Write any two applications of agarose gel electrophoresis.
- 13. Differentiate inductive and deductive research.
- 14. Explain briefly about the role of scitable in education and research.
- 15. What are the differences between graph and table?
- 16. Differentiate *between t*-test and X^2 test.
- 17. Differentiate between standard error and standard deviation.
- 18. What are the uses of *t*-test?

PART C

Answer any 4 (5 marks each)

- 19. Comment on principles of experimental design.
- 20. Explain the rules of graphical representation of data.
- 21. What are the applications of MS word?
- 22. Discuss the use of PAGE as a separation method.
- 23. Explain briefly how information technology influences teaching and learning.
- 24. Discuss the different types of scientific literature.

(5 x 4 = 20)

 $(2 \times 6 = 12)$

PART D Answer any 2 (10 marks each)

- 25. Explain the contributions of Louis Pasteur.
- 26. Write an essay on how to make a good presentation using MS powerpoint. Mention the applications of MS powerpoint.
- 27. Explain the principle, types and applications of chromatography.
- 28. Write an essay on various sampling methods involved in biostatistics.

(10 x 2 = 20)