Reg. No ....   Name **23U624**

B. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023
SEMESTER 6 : BOTANY
COURSE : **19U6CRBOT10 : PERSPECTIVES OF SCIENCE, METHODOLOGY AND GENERAL INFORMATICS**

(For Regular - 2020 Admission and Supplementary - 2019 Admission)

Time : Three Hours   Max. Marks: 60

PART A
Answer All (1 mark each)

1. What is PAGE?
2. What are the types of research based on purpose?
3. What is the SI unit of pressure?
4. What is pH?
5. Differentiate mathematics and statistics.
6. Write short key for copy and save in MS word.
7. What is a critical value?
8. What is INFLIBNET?

$(1 \times 8 = 8)$

PART B
Answer any 6 (2 marks each)

9. Define Explanatory Research with an example.
10. What is a histogram?
11. Write any two applications of colorimeter.
12. Differentiate between dependent and independent variables.
13. Differentiate primary and secondary research.
14. Explain when to use X^2 test.
15. Explain briefly about the role of DNAi in academics.
16. Explain briefly about the role of scitable in education and research.
17. Why t test is known as student's t test?
18. Differentiate standard error and standard deviation.

$(2 \times 6 = 12)$

PART C
Answer any 4 (5 marks each)

19. Comment on principles of experimental design.
20. Briefly explain the need of research in modern world.
21. Explain the rules of graphical representation of data.
22. Give an account on principle and applications of AGE.
23. Explain how do you use different statistical tools such as sum, mean, mode, standard deviation using MS excel.
24. Explain briefly how information technology influences teaching and learning.

$(5 \times 4 = 20)$

PART D
Answer any 2 (10 marks each)

25. Write an essay on how to make a good presentation using MS powerpoint. Mention the applications of MS powerpoints.

26. Write an essay on various sampling methods involved in biostatistics.

27. Discuss the principle and application of electrophoresis.

28. Explain the principle, types and applications of chromatography.

(10 x 2 = 20)