B. Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2021

SEMESTER – 6: BOTANY (CORE COURSE)

COURSE: **15U6CRBOT10: PERSPECTIVES OF SCIENCE, METHODOLOGY AND GENERAL INFORMATICS**

(Common for Regular 2018 admission & Improvement 2017/Supplementary2017/ 2016 /2015 admissions)

Time: Three Hours   Max. Marks: 60

PART A

I. *Answer ALL questions; each question carries 1 mark.*

1. Explain Beer Lamberts Law
2. What is the function of condenser lens in a microscope?
3. Define pH.
4. Name any one Natural Dye
5. What is Type I error?
6. What is the arithmetic mean of the following numbers   1, 3, 8, 11, 12?
7. What is Native PAGE?
8. Expand INFLIBNET   (1 x 8 = 8)

PART B

II*. Answer ANY SIX questions; each question carries 2 marks.*

9. Write notes on standard error
10. What are the advantages of sampling techniques in data collection?
11. What is tabulation?
12. What is meant by resolving power of microscope?
13. Explain density gradient centrifugation
14. What are the applications of SDS electrophoresis?
15. Explain the preparation of acetocarmine
16. What is DPX?
17. What is the necessity of units and dimensions in science experiments?
18. What is DNAi?   (2 x 6 = 12)

PART C

III. *Answer ANY FOUR questions; each question carries 4 marks.*

19. Explain the use of IT in teaching and Learning.
20. Write notes on the application of MS EXCEL
21. Explain TLC and Paper chromatography
22. Explain normal and Binomial distribution
23. Write notes on different mounting media
24. Write notes on Research Ethics   (4 x 4 = 16)

PART D

IV. *Answer ANY TWO questions; each question carries 12 marks.*

25. Explain the various academic search engines.

OR

26. Explain the common measures of central tendencies. Write notes on its merits and demerits.

27. Describe the procedure for permanent slide preparation with the help of a flowchart.

OR

28. Explain the principle, working and applications of TEM.   (12 x 2 = 24)

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