

TB244721Q

Reg. No : .....

Name : .....

16-4

**BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2024**  
**2022 ADMISSIONS REGULAR**  
**SEMESTER IV - CORE COURSE (ZOOLOGY)**  
**ZY4B04B18 - Research Methodology, Biophysics and Biostatistics**

Time : 3 Hours

Maximum Marks : 60

**Part A**

**I. Answer any Ten questions. Each question carries 1 mark**

**(10x1=10)**

1. What is debate?
2. Describe e-Encyclopedia.
3. What is e-Book?
4. Describe Cannon net.
5. What is Molarity?
6. What is Line transect?
7. Define magnification.
8. Explain the principle and application of Camera Lucida.
9. Write a note on the Biodiversity act 2003.
10. Write the formula for calculation of mean for grouped data in continuous series.
11. Explain null hypothesis.
12. Define primary data.

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. Describe the importance of literature reviewing in defining a problem.
14. Explain the objectives of the research.
15. Explain the units of measurement.
16. Explain the preserving methods of a bird.
17. Describe Micrometry and add a note on calibration of micrometer.
18. Give an account on Polarization microscopy.
19. Describe Concept of 3 R –in conservation.
20. Ten replicas of the plant Ipomea were taken for their nitrogen content. Find the standard deviation.  
Nitrogen %    3.52      3.54      3.34      3.58      3.46      3.39      3.59      3.62      3.57      3.51
21. Calculate the standard deviation of the following variables.  
240.12    240.13    240.15    240.12    240.17    240.15    240.17    240.16    240.22    240.21

**Part C**

**III. Answer any Two questions. Each question carries 10 marks**

**(2x10=20)**

22. What are the different presentation techniques?
23. Explain Insects collection methods.
24. Write an essay on Transmission Electron Microscope (TEM).
25. Explain different types of sampling methods.

