



21102844

QP CODE: 21102844

Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021

Fourth Semester

**Core Course - ZY4CRT04 - RESEARCH METHODOLOGY, BIOPHYSICS &
BIOSTATISTICS**

(Common for B.Sc Biological Techniques and Specimen Preparation Model III, B.Sc Zoology and Industrial Microbiology Model III Double Main, B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology Model II Food Microbiology, B.Sc Zoology Model II Medical Microbiology)

2019 Admission only

CB99B4A5

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Differentiate qualitative and quantitative research.
2. What is colloquium?
3. What is an e-Encyclopedia?
4. What is a line transect?
5. Comment on species richness.
6. What is the meaning of giga?
7. What is polarization?
8. Difference between differential and density gradient centrifugation.
9. What are the concept of 3R in conservation?
10. What is Nuremberg code?
11. Differentiate between qualitative and quantitaive variables? Eg.
12. What is Correlation coefficient?

(10×1=10)





Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Briefly explain Scientific method in research process.
14. What are the sources of information in research?
15. Describe Shannon index.
16. Comment on animal rearing techniques.
17. What is Camera Lucida ? Comment on its principle.
18. Briefly explain the application of pH meter.
19. With illustration, explain the parts of a Spectrophotometer.
20. Comment on prevention of cruelty to animals act 1960.
21. Give an account on Mean, median, mode and write down the formula for calculating them and relationship between them.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Explain the different types of Research Communication
23. Explain the different methods used for trapping and collecting of birds.
24. Describe Electron microscopy, its working, principle and uses.
25. Explain different measures of dispersion.

(2×10=20)

