M. Sc DEGREE END SEMESTER EXAMINATION - OCT 2020 : FEBRUARY 2021
SEMESTER 1 : ZOOLOGY
COURSE : **16P1ZOOT04 : BIOSTATISTICS, COMPUTER APPLICATION AND RESEARCH METHODOLOGY**
(For Regular - 2020 Admission and Supplementary - 2016/2017/2018/2019 Admissions)

Time : Three Hours   Max. Marks: 75

PART A
Answer any 8 (2 marks each)

1. What is an ogive?
2. Define 'Harmonic mean'.
3. What does 'Range' mean in statistics?
4. What is Karl Pearson's correlation coefficient?
5. Comment on 'Poisson distribution'.
6. Brief on mathematical models.
7. Define empiricism
8. Comment on qualitative approach to research
9. What is 'Citation Index'?
10. Enlist the salient features of DOS.
11. Write on the advantages of library networking. Give one example.
12. What is search engine? Give two examples.

(2 x 8 = 16)

PART B
Answer any 7 (5 marks each)

13. Find the Median

Body weight in Kg	40-45	45-50	50-55	55-60	60-65	65-70
No. of students	5	8	12	6	3	1

14. What is correlation? What are the major types in it?
15. Explain the basic approaches to research
16. Explain the steps involved in conducting a literature review
17. Comment on the research design to be adopted in descriptive and diagnostic research studies
18. Explain the different types of probability sampling
19. Give an overview of the structure of a research article
20. Write a note about the online resources for research
21. Critically examine the LINUX operating system.
22. Write a note on AGRIS.

(5 x 7 = 35)

PART C
Answer any 2 (12 marks each)

23. Deduce the Spearman's rank correlation coefficient from the following data.

Physics	85	60	73	40	90
Chemistry	93	75	65	50	80

24. Describe the measures of central tendancy.
25. Give an overview of experimental designs in research
26. Describe computer networking. Discuss the advantages and disadvantages of it.

(12 x 2 = 24)