Reg. No …………………….   Name ………………………………………………

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

Time : Three Hours   Max. Marks: 75

Section A
Answer any 8 (2 marks each)

1. Briefly explain 'Non-parametric tests'.
2. Define 'Harmonic mean'.
3. What does 'Range' mean in statistics?
4. What is Spearman's rank relation coefficient?
5. Comment on 'Poisson distribution'.
6. What do you mean by Length – Weight relationship?
7. What is ANOVA?
8. Define 'Rationalism'.
9. Differentiate Conclusion-oriented and Decision-oriented research.
10. Comment on the role of internet in literature review
11. Note down the characteristics of a research design.
12. Point out the difference between 'Conference' and 'Symposium'.

(2 x 8 = 16)

Section 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. Determine the Karl Pearson's correlation coefficient using the given data

X	2	5	7	9	19	17
Y	25	27	26	29	34	35

15. Distinguish between Research and Scientific methods.
16. Explain the steps involved in conducting a literature review
17. Give an overview of the types of research design
18. Comment on the research design to be adopted in exploratory research studies
19. Comment on the role of 'Debate' as an effective tool in scientific communication
20. Give an account of the online resources for research
21. Critically examine the LINUX operating system.
22. Describe any one type of wireless communication methodology.   (5 x 7 = 35)

Section 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 account of the various presentation techniques utilized in scientific communication

26. Describe the different categories of software with one example from each.

(12 x 2 = 24)