MSc DEGREE END SEMESTER EXAMINATION- NOVEMBER 2017
SEMESTER 1 : ZOOLOGY
COURSE : **16P1ZOOT04 ; BIOSTATISTICS, COMPUTER APPLICATION AND RESEARCH METHODOLOGY**

(Common for Regular - 2017 / Supplementary - 2016 Admissions)

Time : Three Hours   Max. Marks: 75

Section A
Answer any 8 (2 marks each)

1. What is the difference between a graph and a diagram?
2. What is random sampling?
3. Find mode
   15,16,17,17,17,18,19,20,22,25
4. What is Spearman's rank relation coefficient?
5. State the multiplication theorem of probability.
6. Differentiate empiricism and rationalism
7. Enumerate the possible motives for doing research
8. What is 'Citation Index'?
9. Enumerate different types of computer software.
10. Differentiate between hardware and Firmware.
11. What is high-level computer language? Give two examples
12. What is computer networking? Comment on its advantages.

(2 x 8 = 16)

Section B
Answer any 7 (5 marks each)

13. Brief on the major graphical methods to represent data.
14. Find mean

Children per family	0	1	2	3	4	5	6
No. of children	7	7	10	5	3	2	1

15. What is regression analysis? Which are the major methods?
16. Differentiate research and scientific methods
17. Comment on the characteristics of a research hypothesis
18. Comment on oral presentation as a means of scientific communication
19. Comment on the role of reference sources in research

20. What is Grid computing? Comment on its advantages.

21. Compare DOS and Windows operating systems

22. What are E – Journals? Comment on its merits.

(5 x 7 = 35)

Section C
Answer any 2 (12 marks each)

23. Find standard deviation

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	10	20	40	30	20	10	4

24. What is correlation? What are the major types in it?

25. Give an account of sample designs in research

26. Give an account on the structural organization of computers and its classification based on generations.

(12 x 2 = 24)