Reg. No	Name	18P148
NCS. NO	Name	101140

# MSc DEGREE END SEMESTER EXAMINATION - NOVEMBER 2018 SEMESTER 1 : ZOOLOGY

## COURSE: 16P1ZOOT04; BIOSTATISTICS, COMPUTER APPLICATION AND RESEARCH METHODOLOGY

(For Regular - 2018 Admission & Supplementary 2017/2016 Admissions)

Time: Three Hours

Max. Marks: 75

#### Section A Answer any 8 (2 marks each)

- 1. What is a sample?
- 2. What is stratified sampling?
- 3. Find mode 15,16,17,17,17,18,19,20,22,25
- 4. What is Karl Pearson's correlation coefficient?
- 5. State the multiplication theorem of probability.
- 6. Differentiate inductive reasoning and deductive reasoning
- 7. Enumerate the possible motives for doing research
- 8. Differentiate conference and symposium
- 9. What is GUI? List its advantages.
- 10. Differentiate between hardware and Firmware.
- 11. What is algorithm? Comment on its relevance.
- 12. What is computer networking? Comment on its advantages.

 $(2 \times 8 = 16)$ 

## Section B Answer any 7 (5 marks each)

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

Plant height	15-20	20-25	25-30	30-35	35-40	45-50
No. of plants	10	20	22	14	18	8

- 15. What is regression analysis? Which are the major methods?
- 16. Differentiate research methods and research methodology
- 17. Comment on the characteristics of a research hypothesis
- 18. Comment on Impact-Factor
- 19. Comment on the importance of extension in scientific research
- 20. What is Cloud computing? Comment on its merits.
- 21. Illustrate the importance of application software with any two examples.
- 22. Differentiate between Bluetooth and Wi Fi.

# Section C Answer any 2 (12 marks each)

23. Describe the major measures of dispersion.

24. Find Karl Pearson's correlation coefficient

Х	3.5	4.2	5.6	6.5	7	8.2	8.8	9	9.7	10
Υ	9.8	9	8.8	8.4	8.3	8.2	8.2	8	8	8.1

- 25. Give an account of experimental designs in research
- 26. Write an essay on different Biological Databases. Explain their role in biological research

 $(12 \times 2 = 24)$