

M. Sc. DEGREE END SEMESTER EXAMINATION NOVEMBER 2016**SEMESTER – 1: ZOOLOGY****COURSE: 16P1ZOOT04 –: BIostatistics, Computer Application and
RESEARCH METHODOLOGY****Time: Three Hours****Max. Marks: 75***(Use of Scientific calculators allowed)***PART A**Answer **any eight** questions. Each carries 2 marks

1. Explain ogives.
2. Define census and sampling. Discuss their advantageous and disadvantageous.
3. Explain Poisson distribution and its applications.
4. What is Probit analysis? What do you mean by LD50?
5. What is a search engine? Name two search engines.
6. What is an operating system? Name two operating systems.
7. Differentiate between high level and low level languages.
8. Find median and mode for the following data on wing lengths of butterflies in centimeter.

4	4	5	3	6	6	3	7	3
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9. Distinguish between relative and absolute measures of dispersion.
10. Define algorithm and flow chart.
11. What is the difference between applied research and fundamental research?
12. Explain important measurement scales. (2 x 8 = 16)

PART BAnswer **any seven** questions. Each question carries 5 marks

13. Explain important methods of collection of data.
14. Explain different measures of central tendency.
15. What is a frequency distribution? Briefly explain the steps involved in the construction of a frequency distribution.
16. Explain Analysis of variance and important experimental designs.
17. Write down the outline of a popular report.
18. Explain various tests based on 'Z'.

19. Describe Normal distribution and its properties.
20. To find whether a certain vaccination prevents a certain disease or not, an experiment was conducted and the following figures in various classes were obtained. Given $\chi^2_1 = 3.84$

	vaccinated	Not vaccinated	Total
Diseased	69	10	79
Healthy	91	30	121
Total	160	40	200

21. Define correlation and explain different types of correlation
22. Describe evolution of computers

(5 x 7 = 35)

PART CAnswer **any two** questions. Each question carries 12 marks

23. What is a sampling design? Explain important sampling designs
24. Define dispersion. Explain different measures of dispersion with respective formula
25. What is a computer? Explain parts of a computer and organization of a computer
26. What is regression? Fit a linear regression equation of Y on X to the given data

Total length(X)	11.2	12.4	13.5	15.7	17.1	16	19	16.9
Body depth(y)	3	3.5	4	4.8	4.9	5.1	5.2	5

(12 x 2 = 24)
