



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION - ZOOLOGY**

**SECOND SEMESTER – APRIL 2013**

**ZO 2956 - BIostatISTICS**

Date : 04/05/2013

Dept. No.

Max. : 100 Marks

Time : 9:00 - 12:00

**PART - A**

Answer **ALL** the questions.

10 x 2 = 20 Marks

1. What is the significance of ANOVA?
2. Differentiate histogram from bar diagram.
3. Explain binomial equation.
4. How will you find standard deviation?
5. What is Hardy Weinburg's law?
6. What is standard error?
7. Comment on sampling techniques.
8. Differentiate primary from secondary data.
9. What is mean, median from mode?
10. How is degree of freedom calculated?

**PART – B**

Answer any **FOUR** of the following:

4 x 10 = 40 Marks

11. Differentiate between skewness and kurtosis.
12. What are the components of a table?
13. Draw a pie diagram for the following data and write its significance.

Dungroller	14
Centipede	7
Millipede	11
Collembola	19
Bugs	4

14. What are the different types of co-efficients of correlation?
15. What are the different kinds of regressions?

16 Calculate the Chi square for the following data and find if there is any significance between vaccination and disease. Table value = 3.84

Vaccinated	Normal	Dead
Deceased cow	51	12
Deceased goat	60	18

**PART – C**

Answer any **TWO** of the following:

2 x 20 = 40 Marks

- 17. What is the significance of graphs and diagrams?
- 18. Give an account on SPSS applications in bio-statistics.
- 19. By ANOVA find if there is an increase in paddy production in different sub species in different plots.  $T_v=3.49$

A	B	C	D
5	6	9	11
3	5	4	9
3	7	8	7
5	2	3	5

20. The following table shows the age (x) and BP (Y) of six individuals. Find regression equation of X on Y and estimate BP of a person of 61, 68 and 75 years respectively.

Age (x)	31	43	51	70	67	35
BP (Y)	127	135	145	160	155	130

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