BACHELOR OF COMPUTER APPLICATIONS (Revised)
(BCA)

00088

Term-End Practical Examination

June, 2016

BCSL-044(P)/S2 : STATISTICAL TECHNIQUES LAB

Time : 1 Hour *Maximum Marks : 50*

Note : *(i) There are two **compulsory** questions in this paper of 20 marks each. Rest 10 marks are for viva-voce.*

(ii) Use any spreadsheet package for solving the problems. For programming (if asked), you may use any C/C++ compiler.

1. Average monthly household expenditure as found in a survey is given as under :

Average Monthly Expenses (in ₹)

15000	7005	7950	8001	9050
12000	11000	8500	9500	13000
6000	9200	10500	8900	12500
12100	14100	8100	9000	11900

Perform the following tasks on the data given above : *8+4+4+4=20*

(a) Enter the data in a spreadsheet software and create a frequency distribution in 8 equal ranges. Use array formula to create the distribution.

(b) Draw the histogram of the data.

(c) Find the mean and variance for the data using spreadsheet formula.

(d) How will the mean and variance change, if five more sample data are added to the current data ? The five more sample data are

20000 19000 18000 12000 16000

2. A total of 400 sheep were selected for testing the effectiveness of a vaccine. The result of the study is given in the following table :

Categories	No occurrence of disease	Disease occurred	Total
Sheep given Vaccine	160	50	210
Sheep not given Vaccine	50	140	190
Total	210	190	400

Use Chi-square test to determine if the vaccination helped in controlling the disease. Explain your results. Make suitable assumptions, if any. *20*