

**BACHELOR OF COMPUTER APPLICATIONS (Revised)
(BCA)**

Term-End Practical Examination

December, 2015

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. Monthly income of a sample of 20 persons in a locality is given as under :

(Monthly income in ₹)

7631	11235	55101	9050	51001
14001	25325	45235	19350	33165
41235	47325	31391	39575	29391
21450	29750	36210	41051	50000

Perform the following tasks for the data given above :

8+4+4+4=20

- (a) Enter the data in a spreadsheet software and create a frequency distribution in the ranges : less than 5000; 5001 to 15000; 15001 to 25000; 25001 to 35000; 35001 to 45000; 45001 to 55000; and more than 55000. Use array formula to create the frequency 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 the highest income is ₹ 2 lakhs, in the sample instead of ₹ 55001 ?

2. A total of 600 persons were selected for finding the effect of healthy food on blood pressure. The results of the study are given below :

Categories	Good control of Blood Pressure	Not good control of Blood Pressure	Total
Given Healthy Food	250	100	350
Given Normal Food	100	150	250
Total	350	250	600

Use Chi-square test to determine if healthy food intake has any effect on good control of blood pressure. Explain your results. Make suitable assumptions, if any. 20
