BACHELOR OF COMPUTER APPLICATIONS (BCA) (REVISED) Term-End Practical Examination June, 2025

BCSL-044(Set-I) : 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 problem. For programming (if asked), you may use any C/C++ compiler.*

1. Monthly expenditure of several households is given in the following table :

Monthly Expenditure (in ₹)

7,000	6,000	6,500	9,000
11,000	8,000	5,000	12,000
10,000	8,000	9,500	11,500
25,000	7,000	6,000	4,000
7,000	8,000	9,000	12,500

Perform the following tasks for the data given above :

(a) Enter the data in a spreadsheet software and create a frequency distribution of this data in 4 equal intervals. Use array formula to find the frequency distribution.   8

(b) Draw histogram of the data and find if there is any outlier in the data.   4

(c) Find the relative frequency distribution from the frequency distribution created in part (a) of this question.   4

(d) Find mean and variance of the data.   4

2. Following data shows the weight of eight persons before and after taking a diet programme :   20

Weight (kgs) (Before attending diet programme)	Weight (kgs) (After the programme)
82	77
85	86
76	70

67	65
95	89
92	80
95	91
86	80

Use t-test with significance level of 5% to verify the statement : "The Diet Programme resulted in reduction of weight of attendees." Clearly write null hypothesis and alternative hypothesis. Explain your results. Make suitable assumptions, if any.

× × × × ×