BCSL-044 (Set-1)

BACHELOR OF COMPUTER APPLICATIONS
BCA (REVISED)
Statistical Techniques Lab

Duration : 1 hour   Maximum Marks : 50

Note : 1. There are two compulsory questions in this paper, each of 20 marks.

2. Rest 10 marks are for viva-voce.

3. Use any spreadsheet package for solving the problem.

4. For programming (if asked), you may use any C/C++ compiler.

1. Daily milk consumption of several households is given below:

Daily Consumption of Milk (in Litres)

2.5	3.0	4.0	2.0	3.5	1.5	2.5	4.5	6.0	5.5
7.0	6.5	3.0	2.5	4.5	6.0	3.5	1.5	2.0	0.5

Perform the following tasks for the data given above.   (8+4+4+4)

(a) Enter the data in a spreadsheet software and use it to create a frequency distribution in 4-equal intervals. Use array formula to find the frequency distribution.

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

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

(d)   Find mean and standard deviation of the data.

2.   Following table show the marks obtained by 8 students, before attending the e-learning course and after attending the e-learning course.   20

Marks (Before Attending)   245 398 475 310 210 275 340 290

Marks (After Attending)   276 375 470 380 200 345 350 300

Use t-test with significance level of 5%, and verify the statement "e-learning course has resulted to increase the performance of the students". Write H_0 and H_1 hypothesis. Also, explain your results. Make suitable assumptions, if any.

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