BACHELOR OF COMPUTER APPLICATIONS (Revised)
(BCA)

Term-End Practical Examination

OO387

June, 2018

BCSL-044(P)/S1 : 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. A study was conducted to find the average sleep time in a day of adults of a locality. The following table shows the data :

   Hours of sleep time every day

6·5	7·5	8·1	3·5	9·2
2·5	6·2	4·7	5·7	6·8
8·5	8·1	6·2	7·1	3·5
9·1	6·1	6·4	3·1	4·9

   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 4 equal intervals. Use array formula to create this distribution.

   (b) Draw the histogram of the data. Is the data close to normal distribution ?

   (c) Find the mean and variance of the data.

   (d) If five more data values (given below) are added to the data, then what would be the mean and variance ?

   The data to be added is :

   Sleep time in Hours

   2·7   3·5   6·2   3·9   4·7

2. Consider the following monthly data of average electricity bill of a household :

Month	Average Bill (₹)
January	500
February	495
March	700
April	850
May	2050
June	3150
July	2830
August	2760
September	1435
October	897
November	605
December	499

(a)   Draw the bar chart for the data.   5

(b)   Find the moving averages of length 4 and plot the moving averages using spreadsheet software.   15

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