# BCSL-044 (Set-3) <br> BACHELOR OF COMPUTER APPLICATIONS <br> BCA (REVISED) <br> 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 $\mathrm{C} / \mathrm{C}++$ compiler.

1. The number of transactions performed by 20 individuals in a bank per year were recorded in the tabular format, shown below:
$(8+4+4+4)$

## Number of Transactions (per year)

$\begin{array}{llllllllll}93 & 55 & 27 & 39 & 106 & 98 & 200 & 45 & 191 & 167\end{array}$

$$
\begin{array}{llllllllll}
35 & 22 & 198 & 63 & 47 & 121 & 189 & 176 & 25 & 32
\end{array}
$$

Perform the following tasks for the data given above.
(a) Enter the given data in a spreadsheet package and create a frequency distribution in 8 -equal ranges. You may use array formula for finding the distribution.
(b) Draw the histogram of the frequencies.
(c) Find mean and standard deviation of the data.
(d) Find the relative frequency distribution for the frequency distribution created in part (a) of this question.
2. Consider the following data of average-electricity bill of a household.

| Month | Average <br> Bill (Rs.) |
| :---: | :---: |
| Jan | 500 |
| Feb | 495 |
| Mar | 700 |
| Apr | 850 |
| May | 2050 |
| June | 3150 |


| Month | Average <br> Bill (Rs) |
| :---: | :---: |
| July | 2830 |
| Aug | 2760 |
| Sep | 1400 |
| Oct | 890 |
| Nov | 610 |
| Dec | 501 |

Referring to the data given above, perform the following:
(a) Draw the bar chart for the data.
(b) Find the moving averages of length 4 and plot the moving averages using spreadsheet software.

