# BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA) 

## ロロ249

Term-End Practical Examination

December, 2015

## BCSL-044(P)/S4 : 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 implementation. For programming (if asked), you may use any C/C++ compiler.

1. Monthly sale of sugar at 20 Departmental Stores was recorded (as sample) in the following table :
(Sales in kilograms)

| 210 | 75 | 425 | 300 | 110 |
| ---: | ---: | ---: | ---: | ---: |
| 125 | 345 | 510 | 69 | 135 |
| 227 | 398 | 475 | 99 | 175 |
| 275 | 310 | 410 | 360 | 205 |

Perform the following tasks for the given data :
$8+4+4+4=20$
(a) Enter the data in a spreadsheet package and create frequency distribution in the ranges : less than $50 ; 51$ to $150 ; 151$ to 250 ; 251 to 350 ; 351 to 450 ; 451 to 550 ; more than 550 . You may use array formula for finding this distribution.
(b) Draw the histogram of the data.
(c) Find the mean and standard deviation for the data using spreadsheet formula.
(d) It was reported that by mistake the data of Store 2 was entered as 75 kg , whereas actually it was 475 kg . What will be the new mean and standard deviation?
2. Consider the following average temperature in the month of October at a specific location :

| Date | Average day <br> temperature $\left({ }^{\circ} \mathrm{C}\right)$ |
| :---: | :---: |
| 1 | 25 |
| 2 | 29 |
| 3 | 33 |
| 4 | 27 |
| 5 | 21 |
| 6 | 19 |
| 7 | 30 |
| 8 | 18 |
| 9 | 22 |
| 10 | 24 |

Find the moving averages of length 3 and 5 . Plot these moving averages using a spreadsheet software.

