BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA)

00249

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 ?

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2. Consider the following average temperature in the month of October at a specific location :

| Date | Average day temperature (°C) | |
|------|---------------------------------|--|
| 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.

20

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