

**BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Revised)**

00515

**Term-End Practical Examination
December, 2013**

BCSL-044 : STATISTICAL TECHNIQUES LAB

Time allowed : 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 programming (if any) you may use any C/C++ compiler.

1. The average life in hours of sample of bulbs is given in the following table :

| | | | | |
|-------|-------|-------|-------|-------|
| 325.2 | 397.3 | 400.5 | 615.2 | 300.5 |
| 600.5 | 507.7 | 375.5 | 575.6 | 375.2 |
| 327.9 | 427.5 | 498.3 | 305.5 | 379.0 |
| 390.7 | 490.7 | 570.7 | 550.9 | 547.7 |

8+4+4+4=20

Perform the following tasks for the data given above :

- (a) Enter the data in the spreadsheet package and create a frequency distribution in 8 ranges of same interval, (use array formula). Make suitable assumptions, if any.
 - (b) Draw the histogram for the data.
 - (c) Find the mean and standard deviation for the data using spreadsheet software.
 - (d) Find the minimum and maximum values using spreadsheet formula.
2. A company has the following production and sales data. **10+10=20**

| Production in (Nos) | Sales in INR |
|------------------------|-----------------|
| 40 | 30,000 |
| 50 | 75,000 |
| 60 | 60,000 |
| 90 | 80,000 |
| 70 | 75,000 |
| 45 | 60,000 |
| 80 | 55,000 |

- (a) Construct a scatter plot (diagram) for the given data using a spreadsheet package.
- (b) Find the best linear regression line, assuming that sales is an independent variable and production is a dependent variable. Explain your answer.