

BACHELOR OF COMPUTER APPLICATIONS (Revised)
(BCA)

Term-End Practical Examination

December, 2015

00149

BCSL-044(P)/S3 : 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. The average heart-beat rate of 20 patients (sample) were recorded. It is shown in the following table :

(Average heart-beat per minute)

65	77	95	110	62
84	72	90	78	94
85	91	97	77	76
89	99	105	107	75

Perform the following tasks for the data given above :

8+4+4+4=20

- (a) Enter the data in a spreadsheet and create a frequency distribution in the ranges : less than 60; 61 to 70; 71 to 80; 81 to 90; 91 to 100; 101 to 110; more than 110. Use array formula for finding the frequency distribution.
- (b) Draw the histogram of the data.
- (c) Find the relative frequency distribution for the frequency distribution created in (a).
- (d) Find the mean and standard deviation for the data using spreadsheet formula.

2. To find a relationship between number of hours a student studies to marks obtained by him/her, the data is collected, and shown in the following table :

Hours put in studies	Marks obtained
15	75
12	81
17	90
10	40
13	60
20	88
16	70
22	90

- (a) Construct a scatter plot (diagram) for the given data using a spreadsheet package.
- (b) Find the best linear regression line assuming that hours put in studies is the independent variable and marks obtained is the dependent variable.

$$10+10=20$$
