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

00243		<b>Term-End Practical Examination</b>				
December, 2016						
		BCSL-044(P)/S3 : STATISTICAL TECHNIQUES LAB				
Time : 1 Hour		Maximum Marks : 50				
Note :	(i)	There are two <b>compulsory</b> 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. Fasting sugar levels of 20 persons were recorded. The following table shows this data :

Sugar level					
75	90	60	100	105	
65	67	97	95	81	
74	73	71	85	89	
95	84	83	110	97	

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 6 equal ranges. 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 obtained in part (a).
- (d) Find the mean and standard deviation for the data using spreadsheet formula.

2. To find a relationship between services and sales of household products, the following data was collected :

Service Satisfaction Level (1 – 10)	Sales (in thousand)	
2	55	
10	65	
9	75	
7	25	
6	85	
5	55	
4	32	
3	16	

(a) Draw a scatter plot for the given data using a spreadsheet package.

(b) Find the best linear regression line assuming that sales is a dependent variable and service satisfaction is an independent variable. Is this line a good fit ? Explain.

1,000