

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

00728

**Term-End Practical Examination**

**June, 2016**

**BCSL-044(P)/S1 : STATISTICAL TECHNIQUES LAB**

*Time : 1 Hour*

*Maximum Marks : 50*

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- 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.*
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1. The electricity consumption of 20 different coolers of same rating were recorded. The following table shows this data :

Power consumption in one hour (number of units of electricity)

0.52	0.75	1.05	2.01	0.79
0.67	0.98	1.51	1.25	1.80
0.49	0.79	0.99	1.11	1.54
0.85	0.95	1.21	1.31	1.41

Perform the following tasks for the data given above :

8+4+4+4=20

- Enter the data in a spreadsheet and create a frequency distribution. You must create suitable ranges for this distribution. Also you must use array formula for finding this distribution.
- Draw the histogram of the data.
- Find the relative frequency distribution for the frequency distribution obtained in part (a).
- Find the mean and standard deviation of the data using spreadsheet formula.

2. A group of 10 students were given a course on English grammar and spellings. The following table shows their marks in two equivalent tests, one conducted before the course and the other conducted after the course :

Marks out of 100

Before the Course	25	75	45	65	35	80	50	66	71	20
After the Course	40	76	50	63	38	81	70	71	70	50

Using t-test with a significance level of 5%, can you say that the course has helped the students in enhancing their language capability ? Clearly write  $H_0$  and  $H_1$  and explain your result. Make suitable assumptions, if any.

20

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