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BCSL-044(P)/S1

BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA)

02009

Term-End Practical Examination

December, 2015

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

Time : 1 Hour

Maximum Marks : 50

- Note: (i) There are two compulsory questions 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. The life of a sample of 20 computer disks in number of days were recorded. The following table shows this data :

(Life of computer disks in number of days)

| 1025 | 897 | 795 | 1205 | 760 |
|------|------|------|------|------|
| 875 | 1000 | 1111 | 987 | 795 |
| 899 | 975 | 825 | 1099 | 1050 |
| 859 | 1075 | 1175 | 1125 | 1011 |

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 750; 751-850; 851-950; 951 1050; 1051-1150; 1151-1250; and more than 1250. Use array formula for finding the frequency distribution.
- (b) Draw the histogram of the data.
- (c) Find the relative frequency of the frequency distribution obtained in part (a).
- (d) Find the mean and standard deviation of the data using spreadsheet formula.

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2. A group of 8 typists were given a crash course in typing. The following table shows their typing speed before and after the course :

| Before the Course | 40 | 21 | 81 | 62 | 18 | 60 | 31 | 35 |
|-------------------|----|----|----|----|----|----|----|----|
| After the Course | 42 | 29 | 79 | 62 | 25 | 61 | 34 | 36 |

Typing Speed in characters typed per minute

Using t-test with a significance level of 5%, can you say that the crash typing course has helped in developing significant increase in typing speed? Clearly write H_0 and H_1 and explain your result. Make suitable assumptions, if any. 20