DISTANCE EDUCATION

B.C.S. DEGREE EXAMINATION, DECEMBER 2010.

BUSINESS STATISTICS

(1999 onwards)

Time: Three hours Maximum: 100 marks

PART A — $(5 \times 8 = 40 \text{ marks})$

Answer any FIVE questions.

- 1. What are the important aspects to be considered by an investigator before using secondary data?
- 2. Distinguish between primary data and secondary data.
- 3. State the important rules of classification.
- 4. What are the objectives of calculating averages?
- 5. Calculate arithmetic mean from the following data:

x: 0-10 10-20 20-30 30-40 40-50 50-60

y: 27 32 57 73 61 46

6. Compute Geometric mean from the following data:

Marks: 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No. of Students: 5 7 12 8 9 5 4

7. Compute Quartile deviation from the following data:

Daily-wages: 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No. of Workers: 11 15 17 19 20 5 4

8. Construct the cost of living index number from the following:

Group: A B C D E

Index: 350 200 240 150 250

Weight 5 2 3 1 2

PART B —
$$(4 \times 15 = 60 \text{ marks})$$

Answer any FOUR questions.

- 9. What is sampling? Explain the important methods of sampling.
- 10. Discuss the problems in the construction of index numbers.
- 11. Explain the different types of average.
- 12. Calculate the standard deviation from the following data:

Marks: 0-10 10-20 20-30 30-40 40-50 50-60 60-70

No. of Students: 5 12 30 45 50 37 21

13. The arithmetic mean of the following distribution is 58.5 units. Find the missing frequency :

Sales (in units): 35-45 45-55 55-65 65-75 75-85 85-95

No. of factories: 21 ? 30 15 17 10

14. Calculate 'Karl Pearson's Co-efficient of correlation from the following data:

x: 25 10 20 32 50 28 26 14 12 13

y: 15 12 19 26 23 22 13 10 15 5

15. From the following data, obtain the regression equations.

x: 6 9 12 5 8 14

y: 5 20 15 12 9 11