DISTANCE EDUCATION

B.C.S. DEGREE EXAMINATION, MAY 2008.

BUSINESS STATISTICS

(1999 onwards)

Time : Three hours   Maximum : 100 marks

PART A — (5 × 8 = 40 marks)

Answer any FIVE questions.

1.   What are the different sources of secondary data?

2.   What points should be taken into account while preparing a table?

3.   What are the merits and demerits of a diagrammatic representation of statistical data?

4.   What are the requisites of tabulation?

5.   Find out the Harmonic Mean :

Family :	1	2	3	4	5	6	7	8	9	10
Income :	85	70	10	75	500	8	42	250	40	36

6.   Compute the mode from the following series :

Size of item :	0-5	5-10	10-15	15-20	20-25	25-30
Frequency :	20	24	32	28	20	16

Size of item :	30-35	35-40	40-45
Frequency :	34	10	8

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7. Find a suitable co-efficient of correlation from the following :

Fertilize used (tones) :	15	18	20	24	30	35	40	50
Productivity (tones) :	85	93	95	105	120	130	164	160

8. Calculate Fisher's Ideal Index from the data given below :

	Price		Quantity	
Commodity	1989	1990	1989	1990
A	8	10	20	30
B	12	15	10	10
C	6	8	16	20
D	4	6	8	10

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

All questions carry equal marks.

9. Distinguish between Primary data and Secondary data. What are the precautions necessary before using Secondary data?

10. The following is the record of weights of 40 students in Kgs.

115	102	93	83	87	70	61	79	83	105
102	72	85	77	104	94	89	91	95	88
65	96	108	99	75	99	87	94	105	98
100	89	97	103	109	108	119	94	95	117

Tabulate the data in the form of frequency distribution taking lowest class as 60-70.

11. Find the mean, median and mode of the following :

X :	15	20	25	30	35	40	45	50
Y :	4	12	30	60	80	90	95	97

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12. Compute the Bowley's measure of skewness for the following data :

Commission :	10-20	20-40	40-60	60-80	80-100
Salesman :	4	10	16	29	52

Commission :	100-120	120-140	140-160	160-180	180-200
Salesman :	80	42	23	17	7

13. Calculate the two regression equation from the following data :

$$X: \quad 10 \quad 12 \quad 13 \quad 12 \quad 16 \quad 15$$
$$Y: \quad 40 \quad 38 \quad 43 \quad 45 \quad 37 \quad 43$$

Also estimate Y when $X = 20$.

14. Compute the trend value by the method of least square from the data given below :

Years :	1987	1988	1989	1990	1991	1992	1993	1994
No. of TV sold :	56	55	51	47	42	38	35	32

15. What are the types of Index Numbers? State the uses, limitations and construction methodology of index numbers.

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