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Reg. No. : .....

Name : .....

Fourth Semester B.Com. LL.B. (Five Year Integrated) Degree Examination, November 2019.

Paper III : BUSINESS STATISTICS

Time : 3 Hours Max. Marks : 80

I. Answer any **five** of the following. Each question carries **2** marks :

1. Define Statistics.

2. What is median?

3. What is Dispersion?

4. Define positive correlation.

5. What do you mean by regression?

6. Define probability.

7. What is census?

(5 × 2 = 10 Marks)

P.T.O.

II. Answer any **four** of the following. Each question carries **4** marks :

1. What is cluster sampling?

2. Explain about data sources.

3. What are the characteristics of arithmetic mean?

4. Write about uses of correlation.

5. Calculate mean from the following data :

Value :	5	15	25	35	45	55	65	75
Frequency :	15	20	25	24	12	31	71	52

(4 × 4 = 16 Marks)

III. Answer any **four** of the following. Each question carries **6** marks :

1. Calculate co-efficient of correlation between *X* and *Y* from the following :

Series *X* :	2	3	4	5	6	7	8
Series *Y* :	4	5	6	12	9	5	4

2. Calculate Kelley's Weighted Index Number from the following data :

Commodity	Price in the		Qty in the	
	Base Year	Current Year	Base Year	Current Year
A	4	5	10	8
B	5	4	8	12
C	3	6	15	5
D	2	3	20	15

3. In certain frequency distribution mean = 30 kgs, median = 27 kgs. Find Mode.

4. Explain the limitations of sampling.

5. What are the differences between primary and secondary data?

(4 × 6 = 24 Marks)

IV. Answer any **three** of the following. Each question carries **10** marks :

1. Find Fisher's Index Number from the following data :

Items	A		B		C	
Year	Price	Val.	Price	Val.	Price	Val.
1998	5	15	4	24	10	70
1999	8	32	9	72	12	65

2. Find the Arithmetic mean for the following data :

Age :	0–10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of persons :	15	30	53	75	100	110	115	125

3. If $r = .6$ and $n = 64$, find probable error and standard deviation.

4. Explain the problems in the construction of index numbers.

(3 × 10 = 30 Marks)
