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Fourth Semester 5 Year B.B.A. LL.B. Examination, December 2015
BUSINESS STATISTICS

Duration : 3 Hours

Max. Marks : 100

- Instructions:**
1. Answer Q. No. **9** and **any five** of the remaining questions.
 2. Q. No. **9** carries **20** marks and the remaining questions carry **16** marks **each**.
 3. Answers should be written in **English**.
 4. **Use** simple calculator.

Q. No. 1. What is statistics ? Explain the scope and limitations of statistics. Marks : 16

Q. No. 2. Calculate mean, median, quartile 1 and quartile 3 for the following distribution : Marks : 16

Value	Frequency
0 – 10	4
10 – 20	8
20 – 30	14
30 – 40	19
40 – 50	25
50 – 60	32
60 – 70	24
70 – 80	17
80 – 90	12
90 – 100	7

Q. No. 3. Distinguish between correlation and regression. Marks : 16

P.T.O.



- Q. No. 4. Calculate co-efficient of variation from the following data using mean and standard deviation.

Marks : 16

Class	Frequency
0 – 5	03
5 – 10	09
10 – 15	15
15 – 20	22
20 – 25	26
25 – 30	19
30 – 35	13
35 – 40	08

- Q. No. 5. Find the co-efficient of correlation between X and Y from the following data :

Marks : 16

X =	5	12	17	25	32	36	40
Y =	10	16	26	32	38	42	46

- Q. No. 6. From the following data calculate quartile deviation and Bowley's co-efficient of skewness.

Marks : 16

Marks	No. of students
0 – 20	01
20 – 40	14
40 – 60	66
60 – 80	122
80 – 100	145
100 – 120	121
120 – 140	64
140 – 160	35
160 – 180	16
180 – 200	05



Q. No. 7. From the following data, prove Fishers Ideal Index Number satisfies Time Reversal Test and Factor Reversal Test.

Marks : 16

Items	Base Year		Current Year	
	Price	Expenses	Price	Expenses
A	8	480	80	960
B	4	400	120	1080
C	20	600	40	1200
D	16	480	50	1200
E	12	480	50	1000
F	15	750	60	1080

Q. No. 8. Write short note on **any two** of the following :

Marks : (2×8=16)

- a) Rank correlation
- b) Uses of Consumer Price Index Number
- c) Primary and Secondary data.

Q. No. 9. Solve **any two** of the following problems :

Marks : (2×10=20)

- a) Draw Histogram and find mode for the following data :

Class	Frequency
10 – 20	5
20 – 30	22
30 – 40	35
40 – 50	25
50 – 60	15



- b) Calculate Karl Pearson's co-efficient of skewness from the following data :

Life Time (hrs.)	No. of Tubes
300 – 400	14
400 – 500	46
500 – 600	58
600 – 700	76
700 – 800	62
800 – 900	48
900 – 1000	22
1000 – 1100	06

- c) Find two regression equations from the following :

X	Y
56	31
60	33
59	32
49	30
53	31
52	30
