0433/3056/1615/1715

III/IV Semester 5 Years B.B.A. LL.B./B.Com. LL.B. Examination, July/August 2026

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. **Answer should be written in English completely.**
4. **Use simple calculator.**

Q. No. 1. Explain in detail functions of statistics and elaborate on its merits and demerits. Marks : 16

Q. No. 2. Calculate Arithmetic Mean, Median and Mode for the following data. Marks : 16

Class Marks	No. of Student
More than 30	100
More than 35	92
More than 40	80
More than 45	62
More than 50	40
More than 55	24
More than 60	14
More than 65	04
More than 70	00

Q. No. 3. The following are the runs scored by too batsman A and B in 10 innings. Marks : 16

A	B
101	97
27	12
0	40
36	96
82	13
45	8
7	85
13	8
65	56
14	15

(i) Who is better run scorer ?

(ii) Who is more consistent in scoring ?

P.T.O.

Q. No. 4. From the following information : Marks : 16

	Annual Rainfall (CMS)	Yield (kgs)
Mean	25	40
Standard Deviation	3	6

r = 0.8.

(i) Find the two regression equation.

(ii) Estimate yield when the rainfall is 29 cms.

(iii) Estimate Rainfall when the Yield is 32 kgs.

Q. No. 5. Calculate fisher's price index and verify for TRT and FRT. Marks : 16

Item	Base Year		Current Year	
	Price	Value	Price	Value
A	4	64	8	96
B	10	120	12	120
C	8	224	10	200
D	4	152	4	104

Q. No. 6. Use the method of rank correlation coefficient to determine which pair of judges has the nearest approach to common taste in beauty ? Marks : 16

R_x	R_y	R_z
1	2	3
4	6	7
6	5	4
3	4	5
2	8	10
9	10	8
7	9	9
8	3	3
10	7	5
5	1	1

Q. No. 7. What is an index number ? Why index numbers are called economic barometers ? Marks : 16

Q. No. 8. Write short notes on **any two** of the following. Marks : 2×8=16

(a) Secondary Data.

(b) Ogive Curves

(c) Consumer Price Index Numbers.

Q. No. 9. Solve **any two** of the following problems. Marks : 2×10=20

(a) Calculate Karl Pearson's co-efficient of skewness.

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

(b) Explain the mathematical properties of arithmetic mean with suitable examples.

(c) Calculate the mean deviation about the mean for the following data.

X	Y
5	8
15	10
25	12
35	14
45	16
55	18
65	20