

2023

(FYUGP)

(3rd Semester)

COMMERCE

(Major)



Paper Code : BC/C5

(Business Statistics)

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. (a) Define statistics. Explain the functions of statistics. 5+10=15

Or

- (b) Explain the various methods of collecting primary and secondary data. 8+7=15

2. (a) Calculate mean and median from the following : 15

Marks : 0-10 10-20 20-30 30-40 40-50 50-60 60-70
 No. of Students : 5 12 20 30 45 50 37 21

Or

(b) Explain the various types of average. Also give its merits and limitations. 7+8=15

3. (a) Calculate Karl Pearson's coefficient of correlation from the following data :

Price (in ₹)	4	5	7	10	4
Supply (in ₹)	10	12	13	15	20
Interpret your result.	13+2=15				

(b) Explain the uses of regression analysis. Distinguish between correlation and regression analysis. 7+8=15

4. (a) Construct index number of price from the following data by applying : 15

- (i) Laspeyres' method
- (ii) Paasche's method

(iii) Bowley's method
 (iv) Fisher's ideal method

Commodity	2021		2022	
	Price	Quantity	Price	Quantity
A	2	8	4	6
B	5	10	6	5
C	4	14	5	10
D	2	19	2	13

Or

(b) Explain the various components of time series. 15

5. (a) Explain the concept and importance of probability. 7+8=15

Or

(b) A bag contains 30 balls numbered from 1 to 30. One ball is drawn at random. Find the probability that the number of the balls drawn be a multiple of—
 (i) 5 or 7
 (ii) 3 or 7
