

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

병 내가 가장

2. (a) Calculate mean and median from the 15 following: : 0-10 10-20 20-30 30-40 40-50 50-60 60-70 Marks No. of Students: 5 12 30 45 50 37 21 Or(b) Explain the various types of average. Also give its merits and limitations. 7+8=153. (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**Or**

(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
В	5	10	6	5
С	4	14	5	10
. D	2	19	2	13

Or

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

15

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