QP CODE: 21101370

21101370

Reg No : .....

Name : .....

B.A DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

CORE - EC6CRT01 - QUANTITATIVE ECONOMICS II

Common for B.A Economics Model II Foreign Trade & B.A Economics Model II Insurance

2017 Admission Onwards

6E6C87A5

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. What is meant by statistical data?
2. Distinguish between frequency polygons and frequency curves.
3. State the emperical relation between mean, median and mode.
4. Define Geometric Mean.
5. Why measures of dispersion is called second order average?
6. Define Mean Deviation.
7. What do you meant by scatter diagram?
8. What is meant by simple regression analysis?
9. In a study of regression equations following values were obtained. Regression coefficient of y on x = 0.25, r = 0.42, s.d (y) = 4, find standard deviation of x.
10. Define simple Index Numbers.
11. What is meant by Cost of Living Index number?
12. What are linear and nonlinear trends?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Calculate weighted arithmetic mean of the following data:

Designation	Monthly salary (Rs.)	Strength of staff
Class I officer	15000	10
Class II officer	8000	20
Class III officer	5000	70
Clerical staff	2500	100
Lower staff	1000	150

14. Define classification. What are the essential features of classification?

15. Explain the different measures of central tendency.

16. Describe the various steps that are taken in conducting a statistical survey.

17. The net profit of a business concern in lakhs of rupees is given below:

Year	2011	2012	2013	2014	2015	2016	2017
Profit	100	160	150	220	300	190	200

Find out range and its relative measure

18. What is a Lorenz curve? Explain the steps to be adopted while drawing a Lorenz Curve.

19. Two ladies were asked to rank 10 different types of nail polish. The ranks given by them are as follows:

Nail Polish	A	B	C	D	E	F	G	H	I	J
X	1	6	3	9	5	2	7	10	8	4
Y	6	8	3	7	2	1	5	9	4	10

Calculate Spearman's rank correlation coefficient.

20. Explain the different types of Index Numbers.

21. Explain briefly the "Least Square Method" of Time Series Analysis.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Describe the different methods of collecting data indicating the merits and demerits of each of them.

23. Determine mode graphically from the following data: Verify the result by mathematical calculations.

Marks	0 - 10	10-20	20 - 30	30 - 40	40 - 50	50 - 60	60 -70	70 - 80	80 - 90	90 – 100
No.of students	5	11	19	21	16	10	8	6	3	1

24. From the following data obtain the two regression equations:

Sales	91	97	108	121	67	124	51	73	111	57
Purchases	71	75	69	97	70	91	39	61	80	47

Also find coefficient of correlation and estimate the value of purchase when sales = 85

25. From the following data construct price index by using Laspeyer's and Paasche's method. Hence calculate Fisher's Index Number.

Commodity	2010		2018	
	Quantity	Price	Quantity	Price
A	6	8	5	10
B	7	10	8	15
C	3	4	3	6
D	2	7	3	8

(2×15=30)