21101201

B.A DEGREE (CBCS) EXAMINATION, APRIL 2021

Sixth Semester

B.A Economics Model I

CORE - EC6CRT11 - QUANTITATIVE METHODS

2017 Admission Onwards

4F40E63B

Time: 3 Hours   Max. Marks : 80

*Instructions to Private candidates only: This question paper contains **two sections**. Answer **SECTION I** questions in the answer-book provided. **SECTION II**, Internal examination questions must be answered in the question paper itself. Follow the detailed instructions given under SECTION II*

SECTION I

Part A

*Answer any **ten** questions.*

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

1. What are the sources of secondary data?

2. What is Bar Diagram?

3. Give a brief account of ogives.

4. What is Geometric Mean?

5. What is Harmonic Mean?

6. What is Range?

7. Explain Correlation.

8. Explain Perfect Correlation.

9. Explain Regression lines.

10. Explain the term cyclical variations.

11. What are the different methods used for measuring trend?

12. Mention two merits and demerits of method of least squares.

Part B

Answer any six questions.

Each question carries 5 marks.

13. What are the merits and demerits of primary data?

14. State the guidelines for preparing questionnaire.

15. Briefly explain different non probability sampling methods.

16. Calculate Arithmetic mean from the following data:

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No: of Students	5	10	25	30	20	10

17. Calculate the mean and standard deviation of the following distribution:

X	2.5- 7.5	7.5- 12.5	12.5 - 17.5	17.5-22.5
F	12	28	65	121

18. How correlation is measured using Scatter diagram?

19. Explain the uses of regression.

20. What are the test to be satisfied by an ideal index number? Prove that Fisher's index number satisfies all test.

21. Explain the different types of preliminary adjustments needed in time series analysis.

(6×5=30)

Part C

Answer any two questions.

Each question carries 15 marks.

22. Define statistics and explain its functions.

23. Calculate the mean deviation using mean and Standard Deviation for the following distribution.

Classes	20-40	40-80	80-100	100-120	120-140
Frequencies	3	6	20	12	9

24. Explain the uses of correlation. Calculate Karl-Pearson's coefficient of correlation for the data given below.

X:	25	28	31	33	36	36	41	43	59	63
Y:	45	40	38	36	31	29	24	23	22	20

25. A. Explain the significance of the consumer price index number.

B. From the following data construct CPI for the year 2014 (a) aggregate expenditure method (b) family budget method.

Items	Consumption in 2000	Price in 2000	Price in 2014
Rice	50kg	10	15
Wheat	10kg	6	8
Pulses	8kg	10	15
Milk	20 litre	8	10
Sugar	5kg	8	11
Edible oil	4kg	40	45
Fuel	10kg	6	8

(2×15=30)