Maximum Marks :80



QP CODE: 20100531

Reg No :

Name :

# BA DEGREE (CBCS) EXAMINATION, MARCH 2020

## **Sixth Semester**

B.A Economics Model I

## Core course - EC6CRT11 - QUANTITATIVE METHODS

2017 Admission Onwards

93BDEF47

### Instructions for 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

Time: 3 Hours

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. What you mean by population
- 2. Explain quota sampling
- 3. Explain frequency polygon
- 4. Define Median.
- 5. Define Mode.
- 6. Define Quartile deviation.
- 7. Correlation.
- 8. Spearman's Rank correlation
- 9. Explain Cause and effect relationship
- 10. Find the Index number using a simple aggregative method

Commodity	Base Price	Current		
Commonly	Dase Flice	Price		
Rice	35	42		
Wheat	30	35		
Pulse	40	38		
Flsh	107	120		

- 11. Write a note on Additive and Multiplicative methods of time series.
- 12. Mention two merits and demerits of free hand method.

(10×2=20)

Answer any **six** questions. Each question carries **5** marks.



- 13. What are the merits and demerits of secondary data
- 14. What are the different parts of a table
- 15.
   Represent the following table by mean of a more than ogives

   Class
   : 0-5
   5-10
   10-15
   15-20
   20-25
   25-30
   30-35

   Frequency : 2
   5
   12
   20
   16
   10
   5
- 16. Calculate the Mean for the following class data

Class Interval	0-8	8-16	16-24	24-32	32-40	40-48
Frquency	8	7	16	24	15	7

- 17. Calculate range and Q.D. of the following observations: 20, 25, 29, 30, 35, 39, 41, 48, 51, 60 and 70
- 18. Distinguish between Linear and Nonlinear Correlation
- 19. Find out the correlation co-efficient

Ī	X:	10	8	6	4	2
	Y:	3	7	11	15	19

- 20. Explain the steps involved in the construction of Index Number.
- 21. Describe the different components of time series.

(6×5=30)

#### Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. What is primary data. Explain the methods of collecting primary data
- 23. The yield of wheat and rice per acre for 10 districts of a state is as under:

District	А	В	С	D	E	F	G	Н	I	J
Wheat	12	10	15	19	21	16	18	9	25	10
Rice	22	29	12	23	18	15	12	34	18	12

Calculate for each crop (Wheat and Rice) (i) Range (ii) Q.D. (iii) Standard deviation

24. From the following demand schedule write down the regression equations.Also (a) estimate demand when price is Rs. 20 and (b) estimate price when demand is 40 kg

Price (in Rs.)	12	13	14	15	16	17	18	19
Demand (in kg)	38	36	36	33	33	32	30	28

25. Show that Fisher's "Ideal' price index number satisfies both the time-reversal test and factor reversal tests and verify this from the following table.

Commodity	2000		2005		
	Price	Quantity	Price	Quantity	
А	6	50	10	56	
В	2	100	2	120	
С	4	60	6	60	
D	10	30	12	24	
E	8	40	12	36	

(2×15=30)