Turn Over

 $(10 \times 2 = 20)$ 

# QP CODE: 23125867

Reg No:Name:

## B.A DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2023

## **Second Semester**

B.A Corporate Economics Model III

## Core Course - EC2CRT05 - ELEMENTARY STATISTICS FOR ECONOMICS-II

## 2017 ADMISSION ONWARDS

17C213CF

Time: 3 Hours

Max. Marks : 80

## Part A

#### Answer any **ten** questions.

#### Each question carries 2 marks.

- 1. Define law of inertia of large numbers.
- 2. Differentiate questionnaire and schedule.
- 3. Define non-sampling errors.
- 4. What are the different types of correlation?

What would be your interpretation if the correlation coefficient r is equal to

1) 0

- 5. 2) -1
  - 3) 1
  - 4) 0.2
- 6. Define multiple regression.
- 7. Define method of least squares.
- 8. Charactestics of index numbers.
- 9. What is fishers method?
- 10. What is splicing?
- 11. What are the importance of time series?
- 12. Merits of moving average method.

#### Part B

#### Answer any **six** questions.

#### Each question carries 5 marks.

- 13. Distinguish between census method and sample survey method.
- 14. Differentiate simple random sampling and stratified random sampling.
- 15. What are the steps in developing sample design?
- 16. Explain scatter diagram.

Compute correlation coefficient

17.	X	12	20	15	22	18	24	20	12	15	22
	у	30	35	28	36	29	39	30	25	30	38

18. What are the properties of regression analysis?

## CALCULATE FISHERS INDEX NUMBER and examine whether it satisfies

1) Time reversal test

2) Tactor revresal test

1	9	
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items	2009 price	2009 quantity	2010 price	2010 quantity
А	6	50	10	56
В	2	100	2	120
С	4	60	6	60
D	10	30	12	24

- 20. Explain the components of time series analysis.
- 21. What are the uses of secular trend?

(6×5=30)

#### Part C

#### Answer any **two** questions.

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

#### Calculate rank correlation coefficient

X	50	60	70	65	80	85	90	92	40	96
У	60	70	75	60	80	82	86	90	50	95

<sup>23.</sup> From the following data of the ages of husband and the age of wife ,form 2 regression equations and calculate husbands age when wifes age is 16?

Husbands age	36	23	27	28	28	29	30	31	33	35
Wife's age	29	18	20	22	27	21	29	27	29	28

22.

From the following data construct index number using un weighted index number?

24.	commodity	A	В	С	D	E
	Price in 1998	50	40	80	110	20
	Price in 2006	70	60	90	120	20

Trend equation is given by  $3x^2+2x+4$  with 2000 as origin. Shift the origin to 2002 and obtain the equation?

(2×15=30)