20UECCT2004

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)

Chromepet, Chennai — $600\ 044$.

B.A. (Eco) END SEMESTER EXAMINATIONS NOVEMBER - 2023

SEMESTER - II

20UECCT2004 - Statistics for Economists-II

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. State the merits and demerits of systematic sampling?
- 2. Predict the coefficient of correlation for the following data by Spearman's rank <u>correlation method</u>.

Х	19	24	12	23	19	16
Y	9	22	20	14	22	18

- 3. Predict the significance of regression analysis.
- 4. Describe the various types of index numbers.
- 5. Interpret the trend values by the method of semi averages.

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Year	1993	1994	1995	1996	1997	1998	1999	2000
Net profit(Rs. lakhs)	38	39	41	43	40	39	35	25

- 6. What are the properties of coefficient of correlation.
- 7. Prepare the regression equation of X on Y from the following data.

	10						
Υ	40	38	43	45	37	43	

8. Examine the merits and demerits of time series analysis.

Section C

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Explain the various types of non-probability sampling.
- 10. Compute Karl Pearson's correlation coefficient if N = 50, $\Sigma X = 75$, $\Sigma Y = 80$, $\Sigma X = 130$, $\Sigma Y = 140$ and $\Sigma X Y = 128$
- 11. Diagnose the two regression equation for the following data.

Х	4	5	6	8	11	
Υ	12	10	8	7	5	

12. Compute (a) Laspyre's (b) Paasche's and (c) Fisher's method of index number for 1990 from the following.

	F	Price	Quantity		
Commodity	Base year	Current year	Base year	Current year	
A	6	10	50	50	
В	2	2	100	120	
С	4	6	60	60	
D	10	12	30	25	

13. Examine the various methods used to measure the secular trend.
