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. Economics - END SEMESTER EXAMINATIONS - NOV'2024
SEMESTER - II
20UECCT2004 - Statistics for Economists-II

Total Duration : 2 Hrs.30 Mins. Total Marks : 60

Section B

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

1. Discuss sampling error and types.
2. In an art competition, two judges accorded following ranks to the 10 participants:

Judge X	1	2	3	4	5	6	7	8	9	10
Judge Y	6	2	9	7	1	4	8	3	10	5

   Calculate coefficient of rank correlation.
3. Write short note on Linear Regression?
4. Find the intercept of linear regression line if, $\sum x = 25$, $\sum y = 20$, $\sum x2 = 90$, $\sum xy = 150$ and n=5.
5. From the data given below, construct the index number for the year 2016 on the base of 2011 by simple aggregative method:

Commodities	**Unit**	**Price (In â¹)**	
		2011	**2016**
Wheat	quintal	200	250
Rice	quintal	300	400
Pulses	quintal	400	500
Milk	litre	2	3
Clothing	meter	4	5

6. Distinguish between Wholesale Price Index and consumer price index.
7. Mention the uses of time series analysis.
8. Differentiate a population and a sample.

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Section C

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

9. Explain the various types of sampling with the Merits and Nemerits.

10. Calculate the correlation coefficient from the following table:

SUBJECT	AGE (X)	GLUCOSE LEVEL (Y)
1	42	98
2	23	68
3	22	73
4	47	79
5	50	88
6	60	82

11. Find the linear regression equation for the given data:

x	y
3	8
9	6
5	4
3	2

12. Calculate the index numbers from the following data using: (any two method)
    (i) Laspeyre's method,
    (ii) Paasche's method,
    (iii) Fisher's ideal method:

Commodity	Base year		Current year	
	Price (in â¹) p0	Quantity q0	Price (in â¹) p1	Quantity q1
A	8	100	10	120
B	4	60	5	80
C	10	20	12	25
D	12	25	15	30
E	3	5	4	6

13. Analyse the components of a time series analysis with its advantages.

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