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. END SEMESTER EXAMINATIONS APRIL - 2022
SEMESTER - II
20UECCT2004 - Statistics for Economists – II

Total Duration : 3 Hrs. **Total Marks : 60**

Section A

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

1. Explain the methods of population sampling.
2. Calculate the coefficient of correlation between x and y for the following data.

X	10	12	13	16	17	20	25
Y	19	22	26	27	29	33	37

3. Calculate the two regression equations of X on Y and Y on X from the data given below, taking deviations from a actual means of X and Y.
   Estimate the likely demand when the price is Rs.20.

Price (Rs)	10	12	13	12	16	15
Amount demanded	40	38	43	45	37	43

4. What is a price index and why is it important?
5. How do you calculate rank in Spearman rank correlation?
6. Construct index number of prices from the following data using a) lapser's method b) fisher's method.

commodity	1970(price in Rs)	qty	1980(price in Rs)	QTY
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24
E	8	40	12	36

7. What is moving average method in statistics? Explain the advantage of simple moving average.
8. Explain the components of time series.

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Section B

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

9. What are different techniques of sampling? Explain.

10. From the following data of whole sale prices what construct (1) chain base index (2) fixed base index. Taking 1963 as origin.

Years	1963	1964	1965	1966	1967	1968	1969	1970
price	50	60	62	65	70	78	82	84

11. Using three years moving average determine the trend and short term fluctuations.

Years	1973	1974	1975	1976	1977	1978	1979	1980	1981
Productions	21	22	23	25	24	22	25	26	27

12. Calculate the Pearson's coefficient of correlation from the following data using 44 and 26 respectively as the origin of X and Y

X	43	44	46	40	44	42	45	42	38	40	42	57
Y	29	31	19	18	19	27	27	29	41	30	26	10

13. Compete lapser's paashee's and fisher's price indices for 1985 using the following data concerning three commodities.

Qty(kg)	Commodity A	Commodity B	Commodity C
1980	15	5	10
1985	12	4	5
Price (per Kg)			
1980	15	20	4
1985	22	27	7

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