## 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.

M.A. Economics - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER - I

## 22PECCT1002 - Statistical Methods for Economics

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

## Section B

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

- 1. State the essentials of Sampling.
- 2. If the actual value is Rs.5,000 and estimated is Rs.4,500. Find the absolute and relative errors.
- 3. Mention the characteristics of a good estimator.
- 4. Explain the concept of Probability.
- 5. A petrol pump proprietor sells on an average Rs.80,000 worth of petrol on rainy days and an average of Rs.85,000 on clear days. Statistics from the Meteorological department show that the probability is 0.76 clear weather and 0.24 for rainy weather on Coming Monday.

Find the expected value of petrol sale on coming Monday.

- 6. Write down the assumptions of Chi Square Test.
- 7. What are the types of Correlation?
- 8. Given the following data, Calculate the expected value of Y When X=12.

	x	у
Average	7.6	14.8
Standard Deviation	3.6	2.5
		r = 0.99

## Section C

- I Answer any **TWO** questions  $(2 \times 10 = 20 \text{ Marks})$
- 9. Explain the methods of Sampling Techniques.
- 10. Discuss the methods of Statistical estimation.
- 11. a) Write down the properties of Binomial distribution.
  - b) What are the Characteristics of Normal Curve.

Contd...

12. How to formulate and test the Hypothesis?

II - Compulsory question 
$$(1 \times 10 = 10 \text{ Marks})$$

13. Calculate correlation coefficient and regression coefficient for the following data.

X	2	4	6	8	10	12	14
Y	4	2	5	10	4	11	12

Find the estimate of y when x=13

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