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.Sc. END SEMESTER EXAMINATIONS NOVEMBER-2022 SEMESTER - I **20USTCT1001 - Descriptive Statistics**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

- 1. Explain the methods of collecting primary data.
- 2. Write any three applications and two limitations of Statistics.
- 3. Explain multiple bar and pie diagrams.
- 4. Obtain the expressions for central moments in terms of raw moments.
- 5. Compute the rank correlation coefficient from the following data

Rank (X):										
Rank (Y):	13	13	24	6	15	4	20	9	6	13

- 6. Establish the relationship between Yule's coefficient of association and coefficient of colligation.
- 7. State any four properties of regression coefficient.
- 8. Show that mean deviation is minimum when it is measured from median.

Section B

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

- 9. Classify the different scales of measurement with an example.
- 10. Describe the steps to construct Frequency Polygon, Frequency Curve and Histogram.
- 11. Explain the term Kurtosis and give the measures of Kurtosis.
- 12. Prove that the correlation co-efficient is unaffected by the change of origin or scale.
- Out of 700 literates in particular districts the number of criminals was 5. Out of 9300 literates in same districts the number criminals 150. Based on these figure do you find any association between illiteracy and criminality. (Positively Associated)
