20USTCT3006

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. Statistics - END SEMESTER EXAMINATIONS APRIL - 2024 SEMESTER -III 20USTCT3006 - Applied Statistics

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

- 1. Prepare a note on the moving average method of measuring trends.
- 2. Explain Box-Jenkins method in detail.
- 3. Discuss the cost of living index number and its uses.
- 4. Illustrate the functions of the National Statistical Commission.
- 5. Describe how you identify trends and seasonality in a time series.
- 6. Sketch the steps involved in the smoothing process.
- 7. Explain the following terms.
 - 1. Base shifting 2. Splicing 3. Deflating
- 8. Infer the present structure of the statistical system in India.

Section C

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

- 9. Describe the least square method of measuring the trend with its merits and demerits.
- 10. Prepare a note on the Link-relative method of computing the indices of seasonal variations.
- 11. Examine the different types of forecasting methods.
- 12. State and prove Time reversal and Factor reversal test.
- 13. Evaluate the different statistical systems widely used in India.
