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 NOVEMBER -2023 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. Describe the method of semi-average and state its merits.
- 2. Explain the ratio to trend method.
- 3. Discuss the Box-Jenkins methodology.
- 4. Explain the problems involved in the construction of index numbers.
- 5. List out the present structure of Indian statistical system and its functions.
- 6. Elaborate the role of forecasting in business.
- 7. Illustrate with an example the method of least square.
- 8. Differentiate between weighted and unweighted index numbers with an suitable example.

Section C

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

- 9. Explain the components of time series.
- 10. Describe the method of link relative with an example.
- 11. Explain the methods of forecasting with the time series data.
- 12. Define (i) base shifting (ii) deflating and splicing of index numbers. Explain and illustrate the same.
- 13. Discuss agricultural, industrial, trade and labour statistics in detail.
