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-2023 SEMESTER - VI 20USTCT6014 - Statistical Quality Control

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

- 1. List the dimensions of quality.
- 2. What are variable control charts?
- 3. Explain the purpose of control charts for attributes?
- 4. Write short notes on a) Producer's risk. b) Consumer's risk.
- 5. Compute the OC function of the Sequential Sampling Plan.
- 6. Find the control limits of sigma chart.
- 7. Describe and Interpret P chart.
- 8. Explain single sampling plan.

Section C

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

- 9. Appraise the structure of 3σ and Six Sigma organisation.
- 10. Compute the control limits of \bar{X} and R chart.
- 11. Determine the control limits of the number non conforming control chart.
- 12. Compute the OC curve , ASN and ATI of Double Sampling Plan.
- 13. Examine the Sequential Probability Ratio test.
