

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 - VI

23USTET6001 - Statistical Quality Control

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. Discuss 3σ limits.
2. List the applications of c Chart.
3. Explain Double Sampling Plan.
4. Explain SPRT.
5. Write a brief note on Process Capability Ratio Test in SQC.
6. Evaluate Control Chart for number of defectives.
7. Explain Control Limits, Specification Limits and Tolerance Limits.
8. Prepare a Criterion for detecting lack of control in \bar{X} and R Charts.

Section C

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

9. List the benefits of Statistical Quality Control.
10. Evaluate the control limits for the p Chart.
11. Explain OC and ATI curves for Single Sampling Plan.
12. Estimate the ASN function of Sequential Sampling Plan.
13. Construct the control limits of \bar{X} and R Charts.
