

**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 APRIL-2022

SEMESTER - VI

13USTCT6014 & UST/CT/6014 - Statistical Quality Control and Reliability

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

1. Describe briefly assignable causes and chance causes.
2. Explain the procedure for constructing p-chart.
3. Distinguish between producer's risk and consumer's risk.
4. Obtain the OC curve for variable sampling plans.
5. Explain the terms (i) Hazard Rate (ii) MTTF
6. Write short notes on specification limits and tolerance limits.
7. List the applications of c-chart.
8. Briefly explain Double Sampling plan.

Section B

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

9. Discuss the benefits of statistical quality control.
10. Describe the construction of \bar{X} and R charts.
11. Describe single sampling plan and derive ATI for single sampling plan.
12. Explain in detail sequential probability ratio test.
13. Write short notes on (i) series system (ii) parallel system (iii) standby system.
