

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 - V

20USTCT5010 - Design of Experiments

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Describe the concept of experimental design?
2. Explain the statistical model for One way classification design.
3. Classify the model for completely randomized design.
4. Explain the estimation of one missing value in RBD.
5. Elaborate the principles of confounding.
6. Distinguish the models between complete confounding and partial confounding.
7. Explain Tukey's test.
8. Describe the model for LSD.

Section C

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

9. Explain the basic principles of Experimentation.
10. Prepare the analysis of ANOVA two way classification.
11. Examine the model for RBD.
12. Classify the analysis of LSD with one missing observation.
13. Assess the analysis of 2^3 factorial experiment.
