### 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 NOVEMBER-2022 SEMESTER - IV

20UCSAT4004 - Statistical Methods and its Applications - II

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

# Section A

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

- 1. Explain the concept of Correlation Analysis.
- 2. Describe about Type I and Type II errors.
- 3. Apply the procedure for the test of difference between proportions.
- 4. Discuss the concept of test the goodness of fit.
- 5. What are the advantages and disadvantages of Non-parametric tests.
- 6. Classify about the layout and ANOVA table of CRD.
- 7. Describe about the critical region in test of hypothesis.
- 8. Determine the steps involved in construction of a LSD with an example.

# Section B

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

- 9. Discuss about the need of two regression lines.
- 10. Describe about the Chi-square distribution.
- 11. Justify the procedure to test the difference between two means for large samples.
- 12. Explain the test of significance based on F distribution.
- 13. Examine the principles of design of experiment.

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