## 20UCSAT4004

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Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

## Section B

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

- 1. Explain correlation and types of correlation.
- 2. Develop the test of significance for single proportion.
- 3. Discover the concept goodness of fit.
- 4. Define randomization, replication and localcontrol.
- 5. Illustrate the difference between type I and type II errors.
- 6. Analyze the paired t-test for difference of means with example.
- 7. Write short note on Yate's correction.
- 8. Discuss about Kolmogorov-smirnov test.

## Section C

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

- 9. Develop the concept of rank correlation coefficient and its advantages over Pearson correlation coefficient.
- 10. Discover student t, F distribution and define their properties.
- 11. Explain One tailed and two tailed tests, testing of hypothesis for equality of two variances.
- 12. Describe the Chi-square test for Independence of attributes.
- 13. Discuss Completely Randomized design and give statistical model for it.

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