

**B.Sc. DEGREE EXAMINATION, APRIL 2020**  
**II Year IV Semester**  
**Statistical Methods and its Applications - II**

**Time : 3 Hours**

**Max.marks :60**

**Section A** ( $10 \times 1 = 10$ ) Marks

Answer any **TEN** questions

1. Write the formula for rank correlation.
2. Define regression.
3. Define type I error.
4. What is standard error for sample mean?
5. Give the test statistic for testing the equality of proportions.
6. Distinguish between large and small sample.
7. Define t-statistic.
8. Give the uses of F-test.
9. What is local control?
10. Give the advantages of RBD.
11. List out any two uses of correlation.
12. Define 2\*2 contingency table.

**Section B** ( $5 \times 4 = 20$ ) Marks

Answer any **FIVE** questions

13. What is scatter diagram explain?
14. Define the following terms: (i) sampling distribution (ii) standard error.
15. Explain testing hypothesis procedure of chi-square in goodness of fit.
16. Write the ANOVA table for LSD.
17. Describe the layout of RBD.
18. Explain principles of scientific experiments.
19. Describe one tail and two tail tests in testing of hypothesis.

**Section C** ( $3 \times 10 = 30$ ) Marks

Answer any **THREE** questions

20. List the properties correlation and Regression coefficient.
21. Describe the following terms: (i) Level of Significance and (ii) critical region with an suitable example. (iii) Null and alternative Hypothesis.
22. Explain large sample test for a population mean and single proportion.
23. Describe the relationship between chi-square and F-statistic.
24. Describe the testing hypothesis procedure of CRD.

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