

FACULTY OF SCIENCE
B.Sc. (CBCS) II-Year (IV-Semester) Regular & Backlog Examinations, June/July-2023
Statistics-IV
(Statistical Inference)

Time: 3 Hours

Max Marks: 80

SECTION-A

(4x5=20 Marks)

Answer any Four questions from the following

1. Define simple hypothesis and composite hypothesis.
2. Define population and sample.
3. State the reproductive property of Chi- Square distribution.
4. Define Interval and ratio scale.
5. What is the relationship between 't' and 'F' distributions.
6. Define order statistics.

SECTION-B

(4x15=60 Marks)

Answer all the following questions

7. (a) Explain the critical value of 5% and 1% level of significance.
(OR)
(b) Obtain 99% confidence interval for the population parameter μ in the normal population, when σ^2 is known.
8. (a) Explain the test procedure for Large sample for testing the difference of proportions.
(OR)
(b) Explain the test procedure for to test two correlation coefficients. Explain.
9. (a) Explain the test procedure for the F – test for equality of variances.
(OR)
(b) Write the properties and applications of 't'-distribution.
10. (a) Distinguish between parametric tests and non parametric tests.
(OR)
(b) Explain Mann Whitney U test procedure.