

**April 2025**  
**B.A./B.Sc.**  
**Second Semester**  
**MULTI-DISCIPLINARY COURSE – 2**  
**STATISTICS**  
*Course Code: STO 2.11*  
(Testing of Hypothesis)

*Total Mark: 25*  
*Time: 1 hour*

*Pass Mark: 10*

*I. Answer two questions, taking one from each unit.*

**UNIT-I**

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|--|---|
| 1. (a) Define null hypothesis and alternative hypothesis.                                      | 4 |
| (b) Describe the test of significance for the difference of two proportions for large samples. | 6 |
| 2. (a) Explain about parameter and statistic with examples.                                    | 4 |
| (b) Describe t-test for difference of two means.   | 6 |

**UNIT-II**

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|---|---|
| 3. (a) Distinguish between parametric and non-parametric tests with examples. | 4 |
| (b) How can one use the Kolmogorov-Smirnov test for two sample problem?       | 6 |
| 4. (a) Write the advantages and disadvantages of non-parametric method.       | 4 |
| (b) Explain sign test for one sample and give some of its uses.               | 6 |

*II. Answer any one of the following questions.*

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|--|---|
| 5. Show that the sample mean is an unbiased estimate of population mean.             | 5 |
| 6. Describe Wald-Wolfowitz run test for testing an identicalness of two populations. | 5 |
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