



**Course Name:** IT Tools for Statistics-II

**Course Code:** T3257-IT

**(UG/PG):** UG

**Number of Credits:** 2

**Level:** 3

**Learning Objective(s):** To enable a student to analyze data using Probability and Probability distributions concepts and tools

To enable a student to use Spread sheet/Microsoft Excel for statistical applications

**Pedagogy:**

Lecture  
Case Study  
Mini Project  
Assignments

**Pre-learning:** Knowledge of Permutation,Combination

**Course Outline:**

| Sr.No. | Topic   | Hours     |
|--------|---|-----------|
| 1      | Probability Sample space, events, types of events, classical definition of probability, axioms of probability Random variable, probability distribution of random variable, conditional probability,Bayes Theorem | 11        |
| 2      | Binomial distribution   | 2         |
| 3      | Poisson distribution  | 2         |
| 4      | Geometric distribution  | 1         |
| 5      | Normal distribution   | 6         |
| 6      | Exponential distribution  | 2         |
| 7      | Testing of Hypothesis- Large sample tests ( z-test for single & two populations   | 3         |
| 8      | Analysis of Variance with Completely Randomized Design ( One way ANOVA), Data analysis using spreadsheet  | 2         |
| 9      | Probability,Binomial,Poisson, Exponential distribution, z-test, ANOVA using spread sheet/excel  | 1         |
|        | <b>Total</b>  | <b>30</b> |

**Books Recommended:**

| SrNo | Title of Book                                    | Authors                    | Publication                    |
|------|--|----------------------------|--------------------------------|
| 1    | Statistical Techniques in Business and Economics | Lind, Marchal, Wathen      | Tata McGraw-Hill Companies     |
| 2    | Statistical for Business and Economics           | Anderson, Sweeny, Williams | South-Western CENGAGE Learning |
| 3    | Business Statistics :Problems and Solutions      | J.K.Sharma                 | Pearson                        |
| 4    | Statistical Methods (Part 2)                     | P.G. Dixit, Prayag & Kapre | Nirali Publication             |
| 5    | Head First Statistics                            | GRIFFITHS, DAWN            | SPD                            |

**Suggested Evaluation Methods:**

Written exam  
Online exam/Quiz  
Mini Project  
Presentation  
Assignments

**Parallel/Similar courses the existing curriculum:**

| Sr.No. | Name of the course | Institute where it was offered |
|--------|--------------------|--------------------------------|
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|----------------|----------------------|---------------------|--|--|
| Name of Member | Mrs. Shilpa Mujumdar | Mrs. Samaya Iyengar |  |  |
| Designation    | Asst. Professor      | Asst. Professor     |  |  |
| Org. / Inst.   | SICSR                | SICSR               |  |  |
| Signature      |                      |                     |  |  |

Name of the Expert:

Signature:

Date: