

LORETO COLLEGE

TIME PLAN JANUARY 2022-JUNE 2022

4th Semester Topic-wise Time Plan

Paper: STS-G-CC-4-4-TH

Applications of Statistics

Name of the teacher: Somdutta Roy

Initials: SR

Teaching Objective:

- To introduce fundamentals of statistical sampling theory and need for it in today's world .
- To help students learn basic concepts of index numbers and demographic methods .
- To introduce the applications of Statistics and its requirement in several real-life aspects .

<u>Units</u>	<u>Hours Alloted</u>	<u>Topics (as per curriculum)</u>	<u>Learning outcomes (Output)</u>	<u>Teaching method</u>	<u>Assessment</u>
Unit 1	20 Hours	<p>a)Introduction to Population, sample and sampling theory.</p> <p>b)Types of sampling</p> <p>c)Simple random sampling</p> <p>d)Stratified random sampling.</p>	<p>a)Knowledge of sampling theory and several related concepts</p> <p>b)Understanding the different sampling techniques and estimating the parameters involved.</p>	<p>a)Interactive-Lecture</p> <p>b)Problem-solving</p> <p>c)Real life application</p>	Problem solving and Assignments
Unit 2	20 Hours	<p>a)Index numbers</p> <p>b)Construction of index numbers</p> <p>c)Uses and limitations of index number</p> <p>d)Tests for index numbers</p> <p>e)Introduction to economic time series.</p> <p>f)Additive and multiplicative models.</p> <p>g)Measurement of trend.</p> <p>h)Moving average method.</p>	<p>a)Understanding the concept of index numbers and their importance.</p> <p>b)To be able to construct index number by several methods.</p> <p>c)Knowledge of economic time series and several related concepts</p> <p>d)Understanding the different methods to measure the trend.</p> <p>e)Learning moving average.</p>	<p>a)Interactive-Lecture</p> <p>b)Problem-solving</p> <p>c)Real life application</p>	Problem solving and Assignments

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Unit 3	20 Hours	<p>a)Demographic Methods b)Measurement of mortality. c)Knowledge of life tables d)Measurement of fertility and reproduction rate.</p>	<p>a)Get a clear idea about several demographic methods and gaining the knowledge of measuring mortality. b)Understanding life tables and its uses. c)Understanding the measurement of fertility and reproduction rates, and population growth.</p>	<p>a)Interactive-Lecture b)Problem-solving c)Real life application</p>	Problem solving and Assignments
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TIME PLAN JANUARY 2022-JUNE 2022

4th Semester Topic-wise Time Plan

Paper: STS-G-CC-4-4-P

Applications of Statistics Lab

Name of the teacher: Somdutta Roy

Initials: SR

Teaching Objective:

To help students learn practical problem solving skill based on datasets arising from various real life scenarios.

<u>Units</u>	<u>Hours Alloted</u>	<u>Topics (as per curriculum)</u>	<u>Learning outcomes (Output)</u>	<u>Teaching method</u>	<u>Assessment</u>
Unit 1	NA	a) Practical on Simple random sampling (SRSWR and SRSWOR) b) Construction of price and quantity index numbers. c) Construction of Consumer and wholesale index numbers. d) Measurement of trend in time series. e) Computation of measures of mortality. f) Completion of life table. g) Computation of measures of fertility and population growth.	a) Using the theoretical concepts to solve real-life problems. b) Grow practical problem skills.	Demonstration of Problem solving	Practical Problem solving and Assignments