

MDA102

STATISTICAL METHODS

Lecture 1
June 22, 2020

MISSION

CHRIST is a nurturing ground for an individual's holistic development to make effective contribution to the society in a dynamic environment

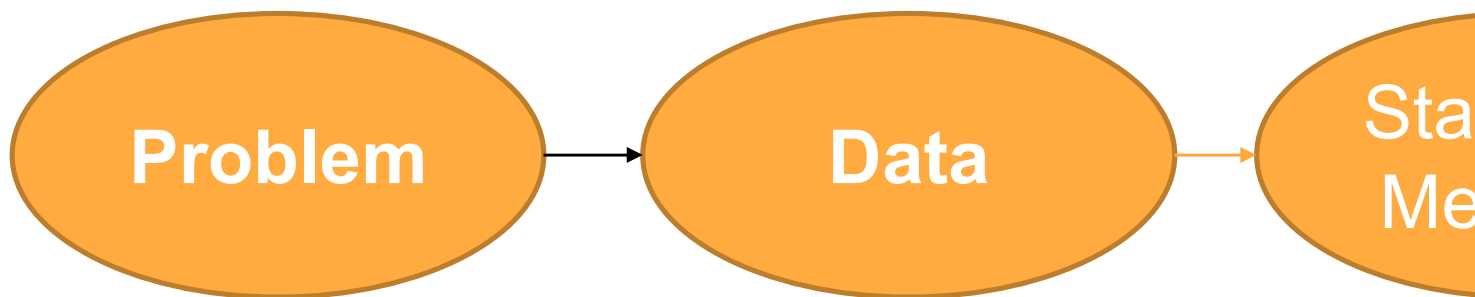
VISION

Excellence and Service

Introduction

Data and Statistical methods

Statistical methods derive meaningful insights from the data.



Statistics - Definition

Statistics is a branch of science which deals with

- Collection
- Tabulation
- Analysis

of scientifically observed data.

Statistics – Key aspects

A few key activities that define the field of Statistics are

- **Descriptive statistics** - exploratory data analysis, unsupervised summaries
- **Inference** - process of making conclusions about populations from
- **Prediction** - Prediction is the process of trying to guess an outcome and some predictors.
- **Experimental Design** - act of controlling your experimental process to draw sound conclusions.

Syllabus

First two aspects, **Descriptive statistics and Inferential statistics** and

By the end of this course you will be able to

- Understand R and R studio and create reports using R markdown
- Analyze data for a given problem
- Apply probability and statistics in real life problems
- Draw scientific inference from data using R

Evaluation Pattern – only CIA courses (Theory + Lab)

3 rd Week	5 th Week	7 th Week	10 th Week	Last Week	Attendance	Reg Ass
Comp-1	Comp-2	Test-1	Comp-3	Test-2		
20	30	30	30	40		

- **Comp-1, Comp-2 & Comp-3:** Assignment /Class Test / Quiz / Project
- **Test-1:** Descriptive Test - Theory (60 minutes)
- **Test-2:** Comprehension Test (should include Lab)
- If a student fails to appear for any of **Test-1** or **Test-2**, there will be no marks. To appear for the repeat test, the student has to apply for the test and get the approval by the Course Coordinator and Head of the Department.

Evaluation Pattern – CIA + ESE (Theory)

4th Week	8th Week	Attendance	Total
CIA-1	CIA-2		
30	35	5	70

CIA-1 & CIA-2:

- Assignment/Class Test/Quiz/Presentation/Demonstration etc.
- Minimum 2 components to be included for each CIA
- One of the component should be a Test (Descriptive or Objective)