



Faculty of: **Computer Science**

Course: **Bachelor of Computer Applications**

Semester: **I**

Subject Code: **MDC201-1C**

Subject Name: **FOUNDATION IN STATISTICAL METHODS**

Sr. No	Category	Subject Code	Subject Name	Teaching hours/Week			Credit hours	Credit Points	Evaluation Scheme/ Semester								Total
				Th	Tu	Pr			Theory				Tutorial / Practical				
									Continuous and Comprehensive Evaluation		End Semester Exams		Internal Assessment		End Semester Exams		
									Mark s	Activity	Mar ks	Duratio n	Mark s	Duratio n	Mark s	Duratio n	
4	MDC	MDC201-1C	FOUNDATION IN STATISTICAL METHODS	4	-	--	4	4	20	Assignment	50	2	--	--	-	-	100

AIM:

The course content has wider applications in various fields where specialists can play a vital role in converting data into wealth. It has a lot of employment potential such as data analysts and consultants. The aim is to familiarize:

- With concepts of statistics
- with Data collection, classification and presentation
- with tools and techniques available for data analysis
- with data analysis and interpretation

COURSE CONTENTS

Unit I Introduction to Statistics

(08 Lectures)

- Introduction to Statistics
- Functions of Statistics
- Collection of Data
- Presentation of Data
- Tabulation of data
- Charting of data

Unit II Central Tendency

(08 Lectures)

- Measures of central tendency
- Mean - meaning and computation
- Median - meaning and computation
- Mode - meaning and computation
- Weighted average mean
- Geometric Mean, Harmonic Mean and Arithmetic Mean

- Unit III Dispersion** (05 Lectures)
- Measures of Dispersion
 - Types of Dispersion
 - Standard Deviation
 - Co-efficient of variation
- Unit IV Correlation** (08 Lectures)
- Correlation– Introduction
 - Karlpearson’s Co-Efficient of Correlation
 - Rank Correlation Coefficient
- Unit V Regression** (08 Lectures)
- Regression – Introduction
 - Regression Analysis
 - Regression Coefficients
- Unit VI** (08 Lectures)
- Index Number - Introduction
 - Methods of Constructing Index
 - Weighted Index Numbers
 - Fisher's Ideal Method

Arrangement of lectures duration and practical session as per defined credit numbers:

Units	Lecture Duration (In Hrs.)		Calculation of Credits (In Numbers)		Total Lecture Duration	Credit Calculation
	Theory	Practical	Theory	Practical	Theory + Practical	Theory + Practical
Unit 1	08	00	3	0	08	3
Unit 2	08	00			08	
Unit 3	05	00			05	
Unit 4	08	00			08	
Unit 5	08	00			08	
Unit 6	08	00			08	
Total	45	00	3	0	45	3

Evaluation:

Theory Marks	Practical Marks	Total Marks
100	00	100

REFERENCE BOOKS:

1. Fundamentals of Statistics: D. N. Elhance, Veena Elhance and B. M. Aggarwal
2. Statistical Methods: S. P Gupta.
3. Fundamentals of Statistics: S.C Gupta
4. Practical Statistics: R S N Pillai and Bhagavathi
5. Statistics (Theory, Methods and Application): D.C. Sancheti and V.K. Kapoor

NPTEL COURSE (<https://nptel.ac.in/>):

1. Business Statistics by Prof. Mukesh Kumar Barua
Course Link: <https://nptel.ac.in/courses/110107114>