

Branch Name:	B.Com
Program Code:	2CM101
Course Name:	Business Statistics-1
Course Code:	2CM1010504
Pre-requisite Course:	Basics knowledge of Statistics.

Course Objectives:

1. To make the students aware about the different statistical methods.
2. To expose students to basic Statistical concepts.
3. To inculcate an analytical approach to the subject matter.

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
Lecture (L)	Tutorial (T)	Practical (P)	Credit	Theory (Marks)		Practical (Marks)		Total (Marks)
				University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
3	--	-	3	70	30	-	-	100

Subject Contents:

Sr. No	Topic	Total Hours	Weightage (%)
1	Transportation and Assignment problems: Transportation problem, Initial solution by north west corner rule, table minimum method and Vogel's method. Stepping stone algorithm and U-V method of solving Transportation problem (without proof). Degenerate transportation problems. Assignment problem. Hungarian algorithm (without proof).	9	25%
2	Index Number: Meaning, Definition, Characteristics, Uses and Limitations of Index Number, Methods of constructing price and quantity indices- Laspeyre's, Paache's, Fisher's, Dorbish-Bowely's and Marshal-Edgeworth's index numbers, Cost of Living Index number of Consumer price index number, Test of adequacy-Time and Factor reversal tests, Chain-base index numbers, Base shifting splicing.	9	25%
3	Matrix Algebra: Definition of Matrix, Different Types of Matrices- Addition, Subtraction and Multiplication of Matrices, Determinate of Square Matrix, Definition of Ad joint of a Matrix, Inverse of a Matrix and its uses to solve Simulations Linear Equations (Up to Three Variables only)- Examples.	9	25%
4	Business Application of Derivatives: Mathematical functions of demand and supply, price elasticity of demand and supply, Cost functions- Average cost, Marginal cost, Marginal revenue and Average revenue and their relationship with elasticity of demand. Market equilibrium, Monopoly problems.	9	25%

Text Books:

1. S.P. Gupta , Statistical Methods, S. Chand Publication.

Reference Books:

1. Business Statistics by Rana, Dalal and others By Sudhir Prakashan, Ahmedabad
2. Hooda R.P. : Statistics for Business and Economics, Macmillan, New Delhi
3. Levin and Rubin : Statistics of Management, Prentice-Hall of India, New Delhi
4. Business Mathematics, B.S. Shah Prakashan
5. Kapoor V.K.: Business Mathematics, Sultan Chand & Sons, New Delhi
6. Sancheti & Kapoor: Business Statistics, Sultan Chand & Sons, New Delhi

List of Open Source Software/learning website:

1. https://www.youtube.com/watch?v=8M0tQKZzdDY&list=PL23dd-8zssJDLv4Zc6975_FKKd4MXwsTC
2. https://www.youtube.com/watch?v=kfFU2xHbtPM&list=PLEHGYFbPuuMEkmJPuJl0OE_eCpetwgaBQ
3. https://www.youtube.com/watch?v=vZZdg4H_x-A
4. https://www.youtube.com/watch?v=FWj2joeVKEU&list=PLLgJVrtHe9RrI23psXSXtp_6OvWuTj9g4

LAB/Practical

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	understand the methods for describing sets of data.	2 Understanding
CLO2	Illustrate the different types of statistical method.	3 Applying
CLO3	Compare about the various statistical method.	4 Analyzing
CLO4	understand the basic Transportation and Assignment problems.	2 Understanding
CLO5	Understanding the concepts of Matrix Algebra.	2 Understanding
CLO6	To describe basic statistical method.	1 Remembering

Mapping of CLOs with Pos & PSOs

Course Learning Outcomes (CLOs)	Program Outcomes (POs)							Program Specific Outcomes (PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
CLO1	H		M	H		L	M	M	H
CLO2									
CLO3	H		H	H	L				
CLO4	H		H	H	M			L	M
CLO5	H		H	H			M		
CLO6	M	L	M	M				M	H

H:High, M:Medium, L:Low