

Subject Code:1CM1010504

Subject Title: Business Statistics-1

Course Objective: To make the students aware about the different statistical methods, that is applicable in corporate world.

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)		
Lecture	Tutorial	Practical	Credit	University Assessment	Institutional Assessment	Total
3	0	0	3	70	30	100

Subject Contents

Sr. No	Topic	Total Hours	Weight (%)
1	Differentiation: Definition of derivatives of function $f(x)$. Derivative of definition. Derivatives of function of the type x^n, e^x, a^x and $\log x$ (without proof). Rules of differentiation (without proof), Derivative of composite and implicit functions. Logarithmic differentiation. Maxima and Minima. Cases of one variable involving second order derivative.	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%

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