

Subject Code: 2CM1010314	Subject Title: Advanced Statistic -2
	COURSE TYPE : CORE ELECTIVE

Course Objective: Course Objective: To make the students aware about different advanced statistical approaches, techniques and methods that is applicable in various field of commerce.

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

Subject Contents			
Sr. No	Topic	Total Hours	Weight (%)
1	Input - Output Analysis : Meaning of Input - output analysis, assumption and limitations, Leontief's static open model - importance and application of the model, Simple examples up to the matrix of order 3×3 .	9	25%
2	Distribution of Income and Economic Models : Concept of Income Distribution models, Study of Paroto's income distribution analysis and interpretations. Lorentz curve of concentration, Fitting of Pareto and Lorentz curves - numerical examples only. Classical models- structural equations and structural parameters of model, Linear homogeneous equation system, study of (i) price determination model and (ii) income determination model.	9	25%
3	Testing of Hypothesis: (A) Large Sample Test (Z test): Introduction, Sampling of Attributes, Sampling of Variables, Test of Significance for difference of standard deviations. (B) Small Sample Test: Introduction, Tests of significance based on t , F and Z distribution, Chi-Square test.	9	25%
4	Analysis of Variance(ANOVA): Introduction, Analysis of Variance, ONE-WAY Classification: Mathematical model, statistical analysis of model, Hypothesis testing for more than Two Means (ANOVA) and related examples, TWO-WAY Classification(one observation per cell):Mathematical model and underlying Assumptions, Statistical analysis of model and related examples.	9	25%

Reference Books:

1. Business and Economics, South - Western Cengage Learning India Pvt. Ltd. New Delhi.
2. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Statistics For
3. J. K. Sharma, Mathematics for Business and Economics, Asian Books Private Ltd
4. Levin and Rubin: "Statistics for Management", Prentice Hall of India Pvt. Ltd. New Delhi
5. S. C. Gupta, V. K. Kapoor, Fundamentals of Applied Statistics, Sultan Chand & Sons, New Delhi.
6. S.C. Gupta: "Fundamentals of Mathematical Statistics" S. Chand, New Delhi.