

Subject Title	Paper DSC 402: BUSINESS STATISTICS – II		
Class/Group	B. Com (CA) and B. Com (Business Analytics) (CBCS)	Semester	IV
Paper: DSC 402			Max. Marks: 70EE+30IE=100
PPW: 5 Hrs.			Exam Duration: 3Hrs

COURSE OUTCOMES DSC 402-Business Statistics'-II, 5 Credits	
CO 1	To inculcate analytical ability of regression, index numbers, time series
CO 2	To inculcate computational ability of regression, index numbers, time series
CO 3	To acquire knowledge about probability, theoretical distributions
CO 4	To understand the Probability and Theorems of Probability: Addition Multiplication, Baye's Theorem.
CO 5	To analyzing the Distribution analysis and Importance Conditions, Constants

Objective: to inculcate analytical and computational ability among the students.

UNITS	CONTENTS
I	REGRESSION: Introduction - Linear and Non Linear Regression – Correlation Vs. Regression - Lines of Regression - Derivation of Line of Regression of Y on X - Line of Regression of X on Y - Using Regression Lines for Prediction.
II	INDEX NUMBERS: Introduction - Uses - Types - Problems in the Construction of Index Numbers - Methods of Constructing Index Numbers - Simple and Weighted Index Number (Laspeyre - Paasche, Marshall – Edgeworth) - Tests of Consistency of Index Number: Unit Test - Time Reversal Test - Factor Reversal Test - Circular Test - Base Shifting - Splicing and Deflating of Index Numbers.
III	TIME SERIES: Introduction - Components – Methods-Semi Averages - Moving Averages – Least Square Method - Depersonalization of Data – Uses and Limitations of Time Series.
IV	PROBABILITY: Probability – Meaning - Experiment – Event - Mutually Exclusive Events - Collectively Exhaustive Events - Independent Events - Simple and Compound Events - Basics of Set Theory – Permutation – Combination - Approaches to Probability: Classical – Empirical – Subjective - Axiomatic - Theorems of Probability: Addition – Multiplication - Baye's Theorem.
V	THEORITCAL DISTRIBUTIONS: Binomial Distribution: Importance – Conditions – Constants - Fitting of Binomial Distribution. Poisson Distribution: – Importance – Conditions – Constants - Fitting of Poisson Distribution. Normal Distribution: – Importance - Central Limit Theorem - Characteristics – Fitting a Normal Distribution (Areas Method Only).
Reference	Text Books & Reference Books 1. Statistics for Management: Levin & Rubin, Pearson, 2. Fundamentals of Statistics: Gupta S.C, Himalaya 3. Business Statistics: Theory & Application, P. N. Jani, PHI Learning 4. Business Statics – II: Dr. Obul Reddy, Dr. D. Shridevi - PBP 5. Business Statistics: Dr. J. K. Thukral, Taxmann Publications 6. Business Statistics: K. Alagar, Tata McGraw Hill 7. Fundamentals of Statistical: S. P Gupta, Sultan Chand 8. Business Statistics: J. K. Sharma, Vikas Publishers 9. Business Statistics: Vora, Tata McGraw Hill 10. Statistics-Problems and Solutions: Kapoor V.K, S. Chand 11. Statistics-Theory, Methods and Applications: Sancheti D.C. &Kapoor V.K 12. Business Statistics: S. K. Chakravarty, New Age International Publishers 13. Business Statistics-G. Laxman, Vasudeva Reddy, K. Goud, Taxman Publications, Hyderabad.