

**B.Com II Year – IV Semester**  
**Department of Commerce and Business Management, Kakatiya University, Warangal**  
**BC405 : Business Statistics – II**

**Max. Marks: 80UE+20IA**

**UNIT-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.

**UNIT-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.

**UNIT-III: TIME SERIES:** Introduction - Components – Methods-Semi Averages - Moving Averages – Least Square Method -Deseasonalisation of Data – Uses and Limitations of Time Series.

**UNIT-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.

**UNIT-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).

**SUGGESTED 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 Statistics: Dr. J. K. Thukral, Taxmann Publications
5. Business Statistics: K. Alagar, Tata Mc Graw Hill
6. Fundamentals of Statistical: S. P Gupta , Sultan Chand
7. Business Statistics: J. K. Sharma,Vikas Publishers
8. Business Statistics: Vora, Tata Mc Graw Hill
9. Statistics-Problems and Solutions: Kapoor V.K, S. Chand
10. Statistics-Teory, Methods and Applications: SanchetiD.C. & Kapoor V.K
11. Business Statistics: S. K. Chakravarty, New Age International Publishers