Complementary Course

BACHELOR OF BUSINESS ADMINISTRATION BBA4C04 - QUANTITATIVE TECHNIQUES FOR BUSINESS

 **Time: 5 Hours per week Credits: 4 Internal 20: External 80**

 **Objective:**

 To familiarise student with the use quantitative techniques in managerial decision making.

 **Learning Outcome :**

 On completing the course students will be able to 1. Understand and develop insights and knowledge base of various concepts of Quantitative Techniques. 2. Develop skills for effectively analyze and apply Quantitative Techniques in decision making.

**Module I** : Quantitative Techniques: Introduction - Meaning and Definition – Classification of QT -QT and other disciplines – Application of QT in business – Limitations. 05 Hours

**Module II** : Time Series and Index Number: Meaning and Significance – Utility, Components of Time Series- Measurement of Trend: Method of Least Squares, Parabolic Trend and Logarithmic Trend- Index Numbers:Meaning and Significance, Problems in Construction of Index Numbers, Methods of Constructing Index Numbers – Weighted and Unweighted, Test of Adequacy of Index Numbers, Chain Index Numbers. 20 Hours 24

 **Module III** : Correlation and Regression Analysis:Correlation:- Meaning, significance and types; Methods of Simple correlation - Karl Pearson‟s coefficient of correlation, Spearman‟s Rank correlation - Regression -Meaning and significance; Regression vs. Correlation - Linear Regression, Regression lines (X on Y, Y on X) and Standard error of estimate. 20 Hours

**Module IV** : Probability: –Concept of Probability—Meaning and Definition— Approaches to Probability Theorems of Probability—Addition Theorem— Multiplication Theorem—Conditional Probability—Inverse Probability—Bayes’ Theorem - Sets Theory:Meaning of Set - Set Operation – Venn Diagrams. 20 Hours

**Module V** : Theoretical Distribution:Binomial Distribution – Basic Assumptions and Characteristics – Fitting of Binomial Distribution – Poisson Distribution – Characteristics - Fitting of Poisson Distribution – Normal Distribution – Features and Properties – Standard Normal Curve. 15 Hours (Theory and problems may be in the ratio of 30% and 70% respectively)