

PAPER CODE: BB406: QUANTITATIVE TECHNIQUES FOR BUSINESS

Learning Objectives:

- To understand and to calculate various types of averages and variation
- To use regression analysis to estimate the relationship between two variables

UNIT – I: INTRODUCTION:

Basic Concepts of Mathematics- Theory of Numbers, Factorization, HCF, LCM.

UNIT – II: LINEAR EQUATIONS:

Theory of Equations: Linear Equations, Quadratic Equations - Solutions of Linear and Quadratic Equations, Solutions of Systems of Linear Equations in the Two Variables (without proof)
Examples of Business Application of Equations.

UNIT – III: MATRICES:

Matrices and Determinants (without proof) of Matrices, Types of Matrices- Problems on Addition, Subtraction, Multiplication ,Division of Matrix -Transpose of Matrix -Ad joint of a Matrix- Inverse of a Matrix, Determinants –Business application of Matrices.

UNIT – IV: PROGRESSIONS:

Progressions (without proof) - Problems on Arithmetic Progression, Geometric Progression-Examples of Business Application of Progressions.

UNIT – V: SIMPLE INTEREST AND COMPOUND INTEREST

Percentage mark-up, Simple Interest and Present Value, Simple Discount, Compound Interest, Definitions, Compound Amount Formula, use of compound Interest table, number of periods and the interest rate.

REFERENCE BOOKS:

1. Business Mathematics, J.K. Singh, 2009, Himalaya Publishing House.
2. Mathematics for Economics and Business, RS Bhardwaj, 2010 , Excel Books
3. Business Mathematics – R.S. Soni , Ane Books Pvt. Ltd. (2013)
4. Business Mathematics by V. K. Kapoor - Sultan chand & sons, Delhi ,2011

Learning Outcomes:

- To draw frequency distribution Tables
- To find Average for different data.
- To Analyze Correlation between Two variables