

BUSINESS MATHEMATICS AND STATISTICS FIRST YEAR PAPER-1

Objectives

To enable the students to learn basic concepts of Profit & Loss with their applications;

To learn the concept, features, types of partnership and calculation of Profit sharing ratios;

To develop an understanding about concept, properties, laws of logarithmic operations;

To enable the students to learn the concept of simple & compound interest along with their calculation;

To help the students in learning the concept of Annuity, Bills of Exchange and stock & Share;

To provide a conceptual clarity about statistical framework and survey; and

To enable the students to understand the concept of data, process of data collection, classification & tabulation of data;

Course Inputs

Unit-I

Business Arithmetic: i) Profit and Loss: Concept, Calculation of Selling Price, Cost Price, Profit or Loss percentage, Concept & Types of Price, Discount

ii) Partnership: Concept, Characteristics, important terms, types of partnership, calculation of Profit Sharing Ratio.

iii) Logarithm: Concept, Features, Properties, types & methods of Logarithm, Laws of Logarithmic Operation, Determination of Log & Antilog under the common logarithm system, interpolation of logarithms, Methods of Logarithm.

iv) Simple & Compound Interest: Concept, Types, Calculation of simple interest, Concept & features of Compound Interest and calculation of compound interest. (Simple problems only).

Unit-II

Business Arithmetic

Annuity:

Concept, Types, special application of annuity, techniques of calculation of Annuity Problems (Future value & Present value of Annuity), Sinking Fund, Loan, overdraft or borrowings.

Discounting of Bills of Exchange: Concept, Features, Types of Bills of Exchange, Important terms (Demand Bill, Time Bill, Terms of Bills, Days of Grace, Bill Value, Discounted Period, Banker's Discount, Discounted Value, Present Value, True Discount, Banker's Gain. Stock & Share: Concept, Features, Classification of Stock and Shares,

Share Vs Stock, calculation of Dividend, Yield, income, cost of investment, Nominal and Market value of Shares, ex-dividend and cum dividend price of a share.

Unit-III

Business Statistics:

- i) Conceptual Framework of Statistics: Meaning, Definition, Origin & Growth
- ii) Characteristics, Scope & functions of Statistics
- iii) Relationship of Statistics with other fields.
- iv) Statistical Survey: meaning and its steps

Unit-IV Business Statistics:

- i) Data: Types of Data - Primary and Secondary Data
- ii) Methods of Collection of Primary & Secondary data .
- iii) Classification of Data and Tabulation of Data