

**MDC-110: COMMERCIAL ARITHMETIC AND ELEMENTARY STATISTICS**  
**(Contact Hours-45, Credits-3)**

**Course Objective:** To familiarize the students with the knowledge of essential mathematics and statistics that is applicable in business.

**Learning Outcomes:** Students will be able to:

- a. Acquire the knowledge of various arithmetical and statistical concepts
- b. Learn techniques which help in dealing with real-life business situations

**UNIT - I**

Average- simple and weighted average, Ratio and Proportion.

Percentage, Problems on Time and Distance.

Simple interest- Bank interest – Average rate of interest: interest on installment payment

Compound Interest (With the help of logarithms)

Annuities- Annuity certain, Annuity due, Immediate Annuity and Deferred Annuity (With the help of logarithms)

Profit and loss, Market price Discount- trade and cash discount

**UNIT - II**

Bankers discount, true discount, Bill value, Present value, average due date and equation of payment

Stock Exchange investment, transfer of stock and shares, Ex dividend and cum dividend prices

Commission and Brokerage

Probability meaning and definition, Events, Trial, Random experiment, mutually likely events, mutually exclusive events, Favorable cases to an event

**UNIT - III**

Statistics: Meaning, Application and Limitations.

Measures of Central Tendency – Averages (Mean, Median, Mode) and Dispersion (Range, Quartile Deviation and Standard Deviation)

Diagrammatic Presentation of business data (Bar diagram, line diagram, pie and rectangular chart)

**Suggested Readings (Latest Edition)**

- S.C. Chanda & NK. Nag, Commercial Arithmetic, Kalyani Publication
- Dr. S. K. Singh & Samresh Chauhan, Commercial Arithmetic, SBPD Publication
- Dhayagude M. G., Commercial Arithmetic and Statistics, Everest Publishing House