PEA303:QUANTITATIVE APTITUDE

L:2   T:1   P:0   Credits:3

Course Outcomes: Through this course students should be able to

- understand the basic concepts of reasoning and quantitative aptitude

- apply the learned concepts to solve the company specific reasoning and quantitative aptitude tests

- analyze the problem and use logic to interpret and handle different situations

Unit I

Number System : Types of Numbers, Rules of Divisibility, Multiplicity and Squaring of Numbers, Arithmetic and Geometric Progression, Concept Clarity and Practice Problems, Cyclicity of unit digit, Remainder Theorem, Application based Questions

Average : Concept Clarity and Practice Problems, Average of numbers, Application based Questions

Percentage : Concept Clarity and Practice Problems, Comparison based questions, Population based examples, Budget based, Application based questions

Unit II

Profit & Loss : Concept Clarity and Practice Problems, Calculation of Profit/Loss Percent, Cost-Selling Price, Profit or Loss, False Weight, Discount, Quantity based, Application based questions

Ratio & Proportion : Concept Clarity and Practice Problems, Ratio, Proportion, Chain rule, Quantity based, Partnership, Application based questions

Alligation or Mixture : Concept and rules of Alligation, Mean Price, Problem based on mixing of liquids/items, Application based questions

Unit III

Time & Work : Concept Clarity and Practice Problems, Formulae, Computation of work done together, Efficiency, Men, Women, Children based problems, Wages based work problems, Garrison, Application based questions

Pipes & Cistern : Inlet-Outlet, Part of tank filled, Time based problems, Application based questions

Simple Interest : Concept clarity and Practice Problems, Rate Computation, Time Computation, Amount Computation

Compound Interest : Concept of simple and Compound interest, Depreciation, Population Based Questions, Economy Based Questions, Questions based on relation between Compound and Simple interest

Unit IV

Time & Distance : Concept of time speed and distance, Time, Distance, Conversion of Units of Speed, Units of speed, Average Speed concept, Application based questions

Problem on Trains : Relative speed concept & application

Boats & Streams : Downstream and Upstream, Application based questions

Unit V

Problems on Ages & Numbers : Problems on Ages, Problem on Numbers, Application based questions

Calendar : Basic concept of calendar, Date and days, Finding the exact day

Clocks : Concept of clock, facts, Formulae, Practice Problems

Unit VI

Permutation & Combinations : Factorial, Difference between Permutation & Combinations, Arrangement and selection based problems, Application based problems

Probability : Experiment, Sample Space, Event, Probability of Occurrence of an Event, Selection based problems, Application based problems

Data Interpretation : Basics of Data Interpretation and Types, Tabulation, Bar Graphs, Pie Charts, Line Graphs

Text Books:

1. QUANTITATIVE APTITUDE by DR. R S AGGARWAL, S Chand Publishing

References:

1. MAGICAL BOOK ON QUICKER MATHS by M. TYRA, BANKING SERVICE CHRONICLE