## SEC-2

## QUANTITATIVE AND LOGICAL THINKING

## Unit - I: QUANTITATIVE APTITUDE & DATA INTERPRETATION

- 1. Whole numbers, Integers, Rational and irrational numbers, Fractions, Square roots and Cube roots, Surds and indices, Problems on Numbers, Divisibility. Steps of Long Division Method for Finding Square Roots.
- 2. Basic concepts, Different formulae of Percentage, Profit and Loss, Discount, Simple interest, Ratio and Proportion, Mixture.
- 3. Time and Work, Pipes and Cisterns, Basic concepts of Time, Distance and Speed; relationship among them.
- 4. Concept of Angles, Different Polygons like triangles, rectangle, square, right angled triangle, Pythagorean Theorem, Perimeter and Area of Triangles, Rectangles, Circles.
- 5. Raw and Grouped Data, Bar graphs, Pie charts, Mean, Median and Mode, Events and Sample Space, Probability.

## Unit - II: LOGICAL REASONING

- 1. Analogy basing on kinds of relationships, Simple Analogy; Pattern and Series of Numbes, Letters, Figures. Coding-Decoding of Numbers, Letters, Symbols (Figures), Blood relations.
- 2. Logical Statements Two premise argument, More than two premise argument using connectives.
- 3. Venn Diagrams, Mirror Images, Problems on Cubes and Dices.