

SSC GD Preparation

Syllabus

Elementary Mathematics Syllabus

- a) **Number Systems:** Understanding natural numbers, whole numbers, integers, rational and irrational numbers, and their properties.
- b) **Computation of Whole Numbers:** Basic operations (addition, subtraction, multiplication, division) with whole numbers.
- c) **Decimals:** Operations and applications involving decimal numbers.
- d) **Fractions:** Operations with fractions, including addition, subtraction, multiplication, and division.
- e) **Relationship Between Numbers:** Concepts like factors, multiples, LCM (Least Common Multiple), and HCF (Highest Common Factor).
- f) **Fundamental Arithmetical Operations:** Basic arithmetic operations and their applications in problem-solving.
- g) **Percentages:** Calculation of percentages, percentage increase/decrease, and applications in word problems.
- h) **Ratio and Proportion:** Understanding ratios, proportions, and their applications in solving problems.
- i) **Averages:** Calculation of mean, median, and mode for given data.
- j) **Interest:** Simple interest and compound interest calculations, including related formulas.
- k) **Profit and Loss:** Problems involving cost price, selling price, profit, loss, and discounts.
- l) **Discount:** Calculations related to marked price, successive discounts, and effective discounts.
- m) **Mensuration:** Area, perimeter, and volume of shapes like triangles, circles, rectangles, squares, and cubes.
- n) **Time and Distance:** Problems involving speed, distance, and time, including relative speed.
- o) **Time and Work:** Calculations related to work efficiency, combined work, and time taken to complete tasks.
- p) **Ratio and Time:** Problems combining ratio with time-related concepts.

q) **Algebra:** Basic algebraic expressions, linear equations, and their applications.

r) **Geometry:** Basic concepts of angles, triangles, circles, and their properties.

s) **Data Interpretation:** Interpreting data from tables, bar graphs, pie charts, and line graphs.

t) **Simplification:** Simplifying numerical expressions using BODMAS (Bracket, Order, Division, Multiplication, Addition, Subtraction) rules.