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Class:10

SYLLABUS

REAL NUMBERS

- ➢ Introduction
- ➢ Euclid's Division Lemma
- ➢ The Fundamental Theorem of Arithmetic
- ➢ Revisiting Irrational Numbers
- ➢ Revisiting Rational Numbers and Their Decimal Expansions
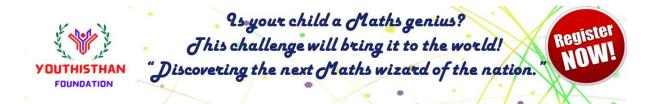
POLYNOMIALS

- ➢ Introduction
- ➢ Geometrical Meaning of the Zeroes of a Polynomial
- ➢ Relationship between Zeroes and Coefficients of a Polynomial
- ➢ Division Algorithm for Polynomials

PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

- ➢ Introduction
- ➢ Pair of Linear Equations in Two Variables
- ➢ Graphical Method of Solution of a Pair of Linear Equations
- ➢ Algebraic Methods of Solving a Pair of Linear Equations
- ➢ Equations Reducible to a Pair of Linear Equations in Two Variables

QUADRATIC EQUATIONS

- ➢ Introduction
- ➢ Quadratic Equations
- ➢ Solution of a Quadratic Equation by Factorisation
- ➢ Solution of a Quadratic Equation by Completing the Square
- ➢ Nature of Roots

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SYLLABUS

ARITHMETIC PROGRESSIONS

- Introduction
- Arithmetic Progressions
- nth Term of an AP
- Sum of First n Terms of an AP

TRIANGLES

- Introduction
- Similar Figures
- Similarity of Triangles
- Criteria for Similarity of Triangles
- Areas of Similar Triangles
- Pythagoras Theorem

COORDINATE GEOMETRY

- Introduction
- Euclid's Definitions, Axioms and Postulates
- Equivalent Versions of Euclid's Fifth Postulate

INTRODUCTION TO TRIGONOMETRY

- Introduction
- Trigonometric Ratios
- Trigonometric Ratios of Some Specific Angles
- Trigonometric Ratios of Complementary Angles
- Trigonometric Identities

SOME APPLICATIONS OF TRIGONOMETRY

- Introduction
- Heights and Distance

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SYLLABUS

CIRCLES

- ➢ Introduction
- ➢ Tangent to a Circle
- ➢ Number of Tangents from a Point on a Circle

CONSTRUCTIONS

- ➢ Introduction
- ➢ Division of a Line Segment
- ➢ Construction of Tangents to a Circle

AREAS RELATED TO CIRCLES

- ➢ Introduction
- ➢ Perimeter and Area of a Circle — A Review
- ➢ Areas of Sector and Segment of a Circle
- ➢ Areas of Combinations of Plane Figures

SURFACE AREAS AND VOLUMES

- ➢ Introduction
- ➢ Surface Area of a Combination of Solids
- ➢ Volume of a Combination of Solids
- ➢ Conversion of Solid from One Shape to Another
- ➢ Frustum of a Cone

STATISTICS

- ➢ Introduction
- ➢ Mean of Grouped Data
- ➢ Mode of Grouped Data
- ➢ Median of Grouped Data
- ➢ Graphical Representation of Cumulative Frequency Distribution

PROBABILITY

- ➢ Introduction
- ➢ Probability — A Theoretical Approach