Class 10 Maths Curriculum

- 1. **Real Numbers**: Understanding and operations with real numbers including rational and irrational numbers, properties of real numbers, and representation on the number line.
- 2. **Polynomials**: Study of algebraic expressions involving one or more variables, their addition, subtraction, multiplication, and division. Also includes factorization of polynomials and algebraic identities.
- 3. **Linear Equations in Two Variables**: Solving simultaneous linear equations involving two variables graphically and algebraically.
- 4. Quadratic Equations: Study of quadratic equations, their solutions using factorization, completing the square method, and quadratic formula.
- 5. **Arithmetic Progressions**: Understanding arithmetic sequences and series, finding the nth term and sum of first n terms.
- 6. **Triangles**: Properties of triangles, congruence and similarity of triangles, Pythagoras theorem, and basic trigonometric ratios.
- 7. **Coordinate Geometry**: Introduction to coordinate geometry, plotting points in the Cartesian plane, distance formula, and section formula.
- 8. **Introduction to Trigonometry**: Basic trigonometric ratios (sine, cosine, tangent), trigonometric identities, and their applications in solving problems.
- 9. **Some Applications of Trigonometry**: Applications of trigonometry in finding heights and distances, angles of elevation and depression.
- 10. **Circles**: Understanding the properties of circles, chords, tangents, and angles subtended by chords in circles.
- 11. **Constructions**: Construction of bisectors of line segments and angles, construction of triangles, and other geometric figures.
- 12. **Areas Related to Circles**: Calculation of areas of sectors and segments of circles, and problems involving circles.
- 13. Surface Areas and Volumes: Calculation of surface areas and volumes of basic 3-dimensional shapes like cubes, cuboids, cylinders, cones, and spheres.
- 14. **Statistics and Probability**: Basics of statistics including mean, median, mode, and probability.