INTERNAL ASSESSMENT	MARKS	TOTAL MARKS
Periodic Tests	**3**	**10 marks for the term**
Multiple Assessments	**2**	
Portfolio	**2**	
Student Enrichment Activities-practical work	**3**	

UNIT-NUMBER SYSTEMS

1. REAL NUMBER

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples. Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

UNIT-ALGEBRA

2. POLYNOMIALS

Zeroes of a polynomial. Relationship between zeroes and coefficients of quadratic polynomials only.

3. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution and by elimination. Simple situational problems. Simple problems on equations reducible to linear equations.

UNIT-COORDINATE GEOMETRY

4. COORDINATE GEOMETRY

LINES (In two-dimensions)

Review: Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division)

UNIT-GEOMETRY

5. TRIANGLES

Definitions, examples, counter examples of similar triangles.

1. (Prove) If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

2. (Motivate) If a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.

3. (Motivate) If in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.

4. (Motivate) If the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.

5. (Motivate) If one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

6. (Motivate) If a perpendicular is drawn from the vertex of the right angle of a right triangle to the hypotenuse, the triangles on each side of the perpendicular are similar to the whole triangle and to each other.

7. (Motivate) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.

8. (Prove) In a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.

9. (Motivate) In a triangle, if the square on one side is equal to sum of the squares on the other two sides, the angle opposite to the first side is a right angle.

UNIT- TRIGONOMETRY

6. INTRODUCTION TO TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 30^0, 45^0 and 60^0. Relationships between the ratios.

TRIGONOMETRIC IDENTITIES

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given

UNIT-MENSURATION

7. AREAS RELATED TO CIRCLES

Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° and 90° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

UNIT- STATISTICS & PROBABILITY

8. PROBABILITY

Classical definition of probability. Simple problems on finding the probability of an event.