Class (Xth)

Mathematics Activity (Any Five)

1. To draw the graph of a quadratic polynomial and observe:

    (i) The shape of the curve when the coefficient of x^2 is positive.

    (ii) The shape of the curve when the coefficient of x^2 is negative.

    (iii)   Its number of zeroes

2. To verify the conditions of consistency/ inconsistency for a pair of linear equations in two variables by graphical method.

3. To identify Arithmetic Progressions in some given lists of numbers

4. To establish a formula for the sum of first n terms of an Arithmetic Progression.

5. To verify the distance formula by graphical method.

6. To verify section formula by graphical method.

7. To verify Basic Proportionality Theorem (Thales theorem).

8. To verify Pythagoras Theorem.

9. To find the number of tangents from a point to a circle.

10. To find the height of a building using a clinometer.

11. To obtain formula for area of a circle experimentally

Project (Any Five)

1. ARYABHAT – THE MATHEMATICIAN AND ASTRONOMER

2. π - WORLD'S MOST MYSTERIOUS NUMBER

3. To develop Heron's formulae for area of a triangle.

4. Chronology of Indian Mathematicians with their contributions.

5. Chronological development of solution of a quadratic equations. .

6. Pythagoras Theorem-Proofs other than given in the present textbook.

7. Knowledge and classification of solid figures with respect to surface areas and volumes.

8. Indian Mathematicians and their contibutions.

9. Ramanujan number (1729)