

# Academic Heights Public School

Jungle Dhusar, Gorakhpur

Session 2017-18

## Syllabus of Class - IX, Subject - Maths

| W. Days                  | Topics   | Activity                     |
|--------------------------|--|------------------------------|
| 24                       | <b>1. Number System</b>  |                              |
|                          | Review (Natural numbers, Integers, rational nos. on the number line. Representation of Terminating / non terminating recurring decimal on the number line).  |                              |
|                          | Irrational numbers.  |                              |
|                          | Real numbers and their decimal expression.   | Number System (I)            |
|                          | Representing real nos. on the number line, operations on real numbers. Laws of exponents for real numbers.   |                              |
|                          | <b>2. Polynomials</b>  | Algebra Identities (2,3)     |
|                          | Introduction (Defn., coefficients, degree, constant, linear, quadratic, cubic, monomial, binomial, trinomial, zero polynomial) Polynomials in one variable, Zero of a polynomial.                        |                              |
|                          | Remainder theorem, Factor theorem, Factorization of Polynomials (quadratic & cubic using factor theorem.) Algebraic Identities.  |                              |
| 16                       | <b>2. Polynomials (contd..)</b>  | (8) Factorial of polynomials |
|                          | Algebraic Identities.  |                              |
| 10                       | <b>5. Geometry</b>   |                              |
|                          | Introduction to Euclid's Geometry, Euclid's definitions, Axioms and Postulates. Equivalent version of Euclid's fifth postulate.  | (9) Bisection on of an angle |
| <b>Periodic Test - 1</b> |  |                              |
|                          | <b>3. Co-ordinate Geometry</b>   |                              |
|                          | Introduction, Cartesian System, Plotting a point in a plane. Focus on linear equation $ax+by+c=0$ by writing $y=mx+c$ & linking with the linear equation in two variables.                               |                              |
|                          | <b>4. Menstruation (Heron's Formula)</b>   |                              |
|                          | Introduction, Area of a triangle by Heron's formula, Application of Heron's formula in finding area of quadrilaterals.   |                              |
| 24                       | <b>6. Lines and Angles</b>   |                              |
|                          | Introduction, Basic terms and definitions, Intersecting lines and Non intersecting lines, Pair of angles, Parallel lines and a transversal, Lines parallel to same line. Angle sum property of triangle. |                              |
|                          | <b>7. Triangles</b>  | Triangle (II)                |
|                          | Introduction   |                              |
| 24                       | <b>7. Triangles (Contd.)</b>   |                              |
|                          | Congruence of triangles. Criteria for congruence of triangles.   |                              |
|                          | Some properties of a triangles, some more criteria for congruence of triangles. Inequalities in a triangle.  |                              |
| <b>Half Yearly</b>       |  |                              |

Principal/Director