

**Mid Term syllabus
CLASS-XI**

ENGINEERING GRAPHICS (SUBJECT CODE: 046)

THEORY

I. PLANE GEOMETRY

Printing English alphabets (capital and small) and numerals in standard proportions.

Unidirectional/aligned system of dimensioning as per SP 46:2003 (Revised).

Unit 1: Construction of lines, angles and their divisions. Simple questions based on triangles, square, rhombus, regular polygons-pentagon, and hexagon.

Unit 2: Construction of circles, inscribing and circumscribing of circles in equilateral triangle, square, rhombus, regular polygons-pentagon and hexagon.

II. SOLID GEOMETRY

Unit 3: Orthographic projection: dimensioning and conventions strictly as per SP-46:2003(Revised). Orthographic projection of points and lines.

Unit 4: Orthographic projection of regular plane figures - triangle, square, pentagon, hexagon, circle and semi-circle.

Unit 5: Orthographic projection of right regular solids such as cubes; prisms and pyramids (square, triangular, pentagonal and hexagonal); cones; cylinders; spheres; hemispheres;