

SYLLABUS :-

Contents:1.Introduction to Manual Drawing (MD);geometrical constructions: (a) dividing a line into several equal segments, (b) bisect and trisect an angle, (c) drawing regular polygons, (d) length of arcs, circles and lines in contact, (d) inscribed circles.2.Introduction to Computer Aided Drafting (CAD) using FreeCAD/Google Sketch; Engineering curves: (1) Ellipse, (2) parabola, (3) hyperbola3.Engineering curves: (4) cycloid, (5) trochoid, (6) involute, (7) evolute and (8) spirals. CAD assignment and discussion.4.Orthographic Projection: (a) Points, (b) Lines, (c) Traces of lines. CAD assignment discussion.5.Projections of Planes: (a) projections on perpendicular planes, (b) projections on auxiliary planes, (c) traces of planes. CAD assignment and discussion.6.Projections of regular solids: cubes, prisms, cylinders, cones, pyramids, tetrahedron. CAD assignment and discussion.7.Isometric Projections and views of solids. CAD assignment and discussion.8.Sections of solids having regular geometric shapes: cubes, prisms, cylinders, cones, pyramids, tetrahedron, spheres. CAD assignment and discussion.9.Development of Surfaces: cylinders, cones, prisms; introduction to non-developable surfaces. CAD assignment and discussion.10.MD Examination11.CAD Examination