



B.TECH. DEGREE EXAMINATIONS: APRIL / MAY 2023

(Regulation 2018)

Second Semester

FASHION TECHNOLOGY

U18MEI2201: Engineering Graphics

COURSE OUTCOMES

CO1: Construct various plane curves.

CO2: Construct projection of points and projection of lines.

CO3: Develop projection of surfaces and solids.

CO4: Solve problems in sections of solids and development of surfaces.

CO5: Apply free hand sketching and concepts of isometric in engineering practice.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (5 x 20 = 100 Marks)

Q.No:1 is compulsory

1. Draw the path traced by a point P moving in such a way that the distance of the focus from directrix is 40 mm. The eccentricity is unity. CO1 [K₃]

2. a) The end A of line AB is on HP and 25 mm in front of VP. The end B is on VP and 50mm above HP. The distance between the end projectors when measured parallel to the line of intersection of HP and VP is 65 mm. Draw the projections of the line AB and determine its true length and true inclinations with HP and VP. CO2 [K₃]

(OR)

- b) The midpoint of a line AB measuring 80mm is 50mm above HP and 30mm in front of VP. The line is inclined at 45° to HP and 30° to VP. Draw the projections and find the length of plan and elevation. CO2 [K₃]

3. a) Draw the projections of a circular lamina of 25mm radius having its plane vertical to HP and inclined 30° to VP. Its center is 30 mm above HP and 20mm in front of VP. CO3 [K₃]

(OR)

- b) An Hexagonal Prism, having a base with a 33 mm side and 70 mm long axis, resting VP with one of its base edge. Such that the axis is inclined at 30° to the VP and Parallel to the HP. Draw its Projections. CO3 [K₃]

4. a) A cube of side 40 mm is placed and cut by a plane in such a way that the true shape of the section is a regular hexagon. Draw the front and top views of the cube and determine the inclination of the plane with the HP. CO4 [K₃]

(OR)

- b) A regular hexagonal pyramid of side of base 30 mm and height 60 mm is resting on its base on HP such that two of the sides of the base are perpendicular to VP. It is cut by a plane inclined at 40° to HP and perpendicular to VP. The cutting plane bisects the axis of the pyramid. Obtain the development of the lateral surface of the truncated pyramid. CO4 [K₃]

5. a) A Cylinder of base diameter 33 mm and height 55 mm is resting on HP with its base. It is cut by a cutting plane perpendicular to VP, 45° inclined to HP and meeting the axis 15mm from the top face. Draw the isometric view of the truncated solid. CO5 [K₃]

(OR)

- b) Draw the front view, top view, and right-side view of the given isometric view with freehand sketch without using any drawing instruments. CO5 [K₃]


