Department of Applied Sciences & Humanities

F.E. Sem-II Academic Year – 2025-26

QUESTIONS FOR PRACTICE

Course Name- Engineering Graphics

1) Line AB 70 mm long is inclined at 30° to HP and 60° to VP. Its end A is 10 mm above HP and 20 mm in front of VP, while its end B is in 3rd quadrant. Draw the projections of line AB

2) The distance between the end projectors of a line AB is 40 mm. The end point A is 15 mm above the HP and 20 mm in front of the VP. The line is inclined 30° to the HP. Draw the projections if the true length of the line is 80 mm. Find its inclination with the VP. Take end point B in the 1st quadrant

3) The front view of a line AB 80 mm long, measures 60 mm. The end A is 15 mm in front of VP and 10 mm above HP. The end B is in third quadrant, Draw the projections of the line, if the line is inclined 30° to HP. Also find the inclination of line with VP.

4) The top view and the front view of a line AB measures 70 mm and 58 mm respectively. The line AB is inclined at an angle of 35° to the HP. The end A is 15 mm above the HP and 12 mm in front of the VP. The other end B is also in the first quadrant. Draw the projections of line AB and find its true length and true inclination with the VP.

5) The distance between the end projectors of a line AB is 60mm. The end A is 25mm above H.P. and 45mm in front of V.P., while the other end B is 60mm above H.P. and 15mm in front V.P. Draw projections and find the true length and also inclination of the line with H.P. and V.P.

6) An inelastic string 100 mm long is wound around a disc of 40 mm diameter. Trace the path of free end of a string and name the curve.

7) One end of an inelastic string 125mm long is attached to the circumference of a circular disc of 50mm diameter. The free end of the string is wound around the disc, keeping the string always tight. Draw the locus of the free end and name the curve

8) A circular plate of diameter 60 mm rolls without slipping along a straight line inclined at 30° to horizontal. Draw locus of point of its contact with the line if it completes one rotation. Name the curve

9) Draw involute of a circle of 60 mm diameter. Also draw the normal and tangent at a point on the curve at a distance of 120 mm from the centre of the circle

10)   A square pyramid side of base 40 mm and axis length 60 mm has one of its side of base in the HP. The axis of the solid is inclined to the HP at an angle 30˚.

11)   Draw the projections of a regular hexagon of sides 30 mm, having one of its sides in the HP and inclined at 60^0 to VP , and its surface making an angle of 45^0 with the HP.

12)   A hexagonal prism with edge of base 30 mm and height 70 mm has its edge of base in VP and the base surface inclined at 30° to VP and perpendicular to HP. Draw its projections

13)   A pentagonal lamina of sides 30 mm is resting on HP with surface inclined at 45^0 with HP and Resting edge is inclines at 30^0 with VP. Draw the projections.

14)   A pentagonal pyramid has an height of 60mm and side of base 30 mm . The pyramid rests with one of its base edges on HP such that one of the triangular faces containing edge on HP makes 45^0 with HP. Draw the projections.