

School of Computing Science and Engineering

B.Tech CSE
ETE - Jun 2023

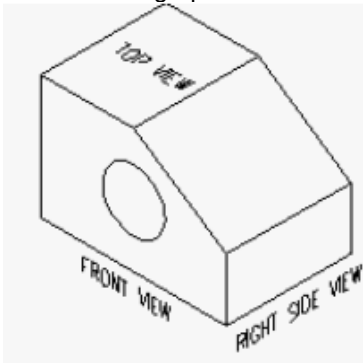
Time : 3 Hours

Marks : 100

Sem II - G3UB120B/BME01T1001 Engineering Graphics and Introduction to Digital Fabrication

*Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary*

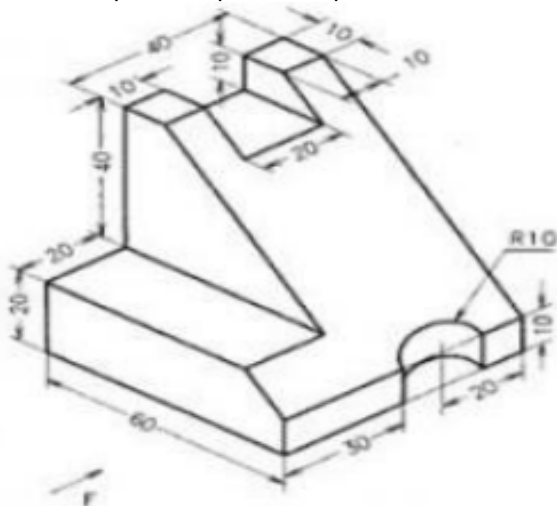
1. Explain first angle projection with its symbol K1 CO1 (5)
2. Outline the benefits of Computer-Aided Design (CAD) K2 CO2 (5)
3. Identify the differences between plane and lamina. Explain with example. K3 CO3 (5)
4. The following points should have their orthographic projections drawn about a single reference line, assuming that their projectors are 25 mm apart horizontally. K1 CO3 (10)
 - a. Point P is located 40mm in front of VP and 30mm above HP.
 - b. Point Q is 35 mm behind VP and 25 mm above HP.
 - c. Point R is located 38mm behind VP and 32mm behind HP.
 - d. Point S is located 15mm in front of VP and 36mm below HP.
5. A Hexagonal plane with a 30mm side has its surface parallel to and 20mm in front of the VP. Draw its Projections, when (a) a side is perpendicular to HP (b) a side is parallel to the HP (c) Side is inclined at 45 degree to the HP K4 CO3 (10)
- 6) Draw the orthographic views of the given isometric view of the object: K4 CO4 (10)



OR

Examine the provided pictorial representation and illustrate the front, top, and side views:

K4 CO4 (10)

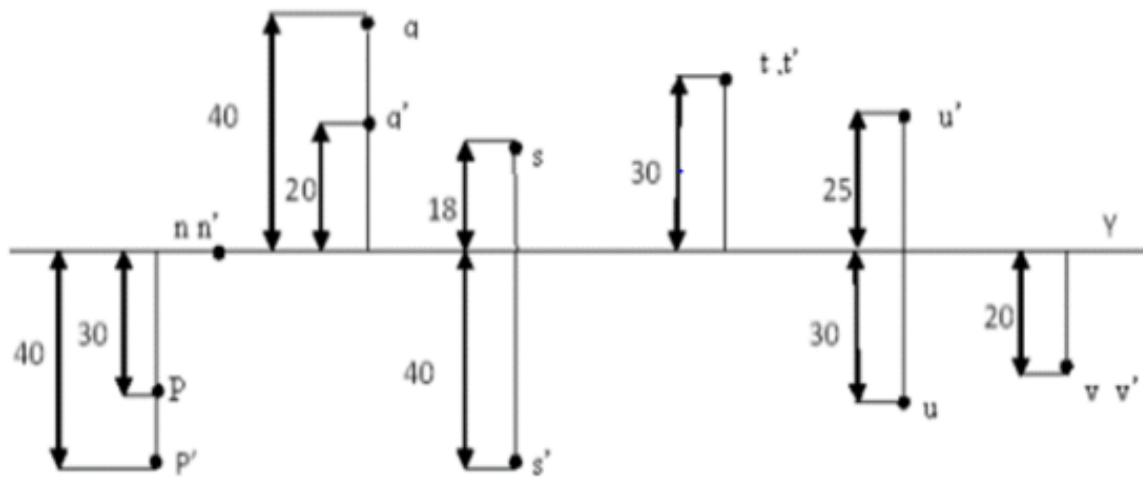


7. A line AB 70 mm long has its end A 15 mm above HP and 25 mm in front of VP. Its top view (plan) has a length of 40 mm. Draw its projections and find the inclination of the line with HP. K2 CO3 (10)
8. A rectangle 30mm and 50mm sides is resting on HP on one of its small side which is 30 degree inclined to VP, while the surface of the plane makes 45 degree inclination with HP. Draw its projections K3 CO3 (15)

PTO

9. In the figure, projections of various places are shown. Find out where they stand in relation to HP and VP and mention their quadrant. In millimetres, distances are specified.

K3 CO3 (15)



- 10) A pentagonal Prism having a base with 30 mm side and 60mm long Axis, has one of It's bases in the VP. Draw Its projections When (a) rectangular face is parallel to and 15 mm above the HP (b) A rectangular face perpendicular to HP and (c) a rectangular face is inclined at 45 degree to the HP

K4 CO3 (15)

OR

A Square prism, having a base with a 35mm side and an 60mm long axis, rests on one of its base edges in the HP such that the axis is inclined at 45 degree to the HP and 45 degree to the VP. Draw its projections, if the resting edge makes an angle of 30 degree with VP?

K4 CO3 (15)