



CBCS SCHEME

17CED14/24

First/Second Semester B.E. Degree Examination, Aug./Sept. 2020

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks: 100

Note:

1. Answer three full questions.
2. Use A4 sheets supplied.
3. Draw to actual scale.
4. Missing data, if any, may be assumed suitably.

1. a. Draw the projections of the following points on the same XY line, keeping convenient distance between each projector. Name the quadrants in which they lie.

A -30 mm above HP & 35mm in front of VP.

B -35 mm above HP & 40 mm behind VP.

C -40 mm above HP & on VP.

D -35 mm below HP & 30 mm in front of VP.

10 Marks

b. The top view of a 75 mm long line AB measures 65 mm, while the front view is 50 mm. Its one end A is on HP and 12 mm in front of VP. Draw the projections of AB and determine its inclinations with the HP and VP.

20 Marks

OR

1. A pentagonal lamina of edges 25 mm is resting on VP with one of its sides such that the surface makes an angle of 60° with VP. The edge on which it rests is inclined at 45° to HP. Draw its projections.

30 Marks

2. A square prism 35 mm side of base and 60 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and appears to be inclined to VP at 45° .

40 Marks

3. A regular pentagonal prism of height 60 mm and base edge 30 mm rests with its base on HP. The vertical face closest to VP is 30° to it. Draw the development of the truncated prism with its truncated surface inclined at 60° to the axis and bisecting it.

30 Marks

OR

3. Draw the isometric projection of the combination of solids formed by a frustum of cone and coaxial frustum of pentagonal pyramid. The frustum of cone is of 80 mm base diameter, 60 mm top diameter and height 25 mm. The upper frustum of pyramid is of 30 mm side of base, 20 mm side of top face and height 40 mm.

30 Marks