

First/Second Semester B.E. Degree Examination, Feb./Mar. 2022

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. A point 'P' is 15 mm above HP and 25 mm in front of VP. Another point 'Q' is 25 mm behind VP and 40 mm below HP. Draw their projections when the distance between their projectors parallel to XY line is zero mm. Add the right side view only to point 'Q'. **10 Marks**
- b. A line has its end A 15 mm from HP and 10 mm from VP. The end B is 55 mm from HP and the line is inclined at 30° to HP. The distance between the end projectors is 50 mm. Draw the projections of the line. Determine the true length and true inclination with VP. **20 Marks**

OR

1. A rectangular lamina of 35 mm X 20 mm rests on HP on one of its shorter edges. The lamina is rotated about the edge on which it rests till it appears as a square in the top view. The edge on which the lamina rests is inclined 30° to VP. Draw its projections and find its inclination to HP. **30 Marks**
2. A hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its edges. Draw the projections of the prism when the axis is inclined to HP at 45° and appears to be inclined to VP at 40°. **40 Marks**
3. A pentagonal pyramid of 30 mm edges of base and 50 mm height rests vertically with one of its base edges parallel to VP and nearer to it. It is cut as shown in the figure. Draw the development of the lateral surfaces of the upper portion of the pyramid. **30 Marks**

OR

3. A hemisphere diameter 70 mm is placed on the ground on its curved surface. A cone base diameter 70 mm and height 70 mm is placed centrally on it. Draw the isometric projection of the combination. **30 Marks**

