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CBSC SCHEME

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15CED14/24

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

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours **(COMMON TO ALL BRANCHES)** Max. Marks: 80

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 is 30 mm behind VP, 30 mm above HP and 25 mm in front/ behind/ from LPP. Draw its projections and name the side view. **10 Marks**

b. The point B of a line AB is on the horizontal plane the top view of the line makes an angle of 30^0 with XY line being 80 mm. The point A is on vertical plane and 50 mm above the horizontal plane. Draw the top and front view of the line and obtain the true length of the line also find the inclinations of the line with the two planes. **15 Marks**

OR

1. A hexagonal lamina of sides 25 mm rests on one of its corner on HP the corner opposite to the corner on which it rests is 35 mm above HP and the diagonal passing through the corner on which it rests is inclined at 30^0 to VP. Draw its projections find the inclination of the surface with HP. **25 Marks**

2. A hexagonal pyramid of 25 mm sides of base and 50 mm axis length rests on HP on one of its edges of the base which is inclined to VP at 30^0. Draw the projections of the pyramid when the axis is inclined to HP at 45° **30 Marks**

3. A hexagonal pyramid of base sides 25 mm and height 60 mm is resting with its base on HP and an edge of base inclined at 40^0 to VP. It is cut to the shape of a truncated pyramid with the truncated surface indicated in the front view at a point on the axis 20 mm from the apex and inclined at 40^0 to XY draw the projections and show the development of the lateral surface of the remaining portion of the pyramid. **25 Marks**

OR

3. A sphere of diameter 40 mm is placed centrally on the flat surface of a hemisphere diameter 60 mm. Draw the isometric projection of the combination. **25 Marks**