CBCS SCHEME

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18EGDL15/25

First/Second Semester B.E. Degree Examination, Jan./Feb. 2021

ENGINEERING GRAPHICS

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 straight line PQ 65 mm long is inclined at 45^0 to HP and 30^0 VP. The point P is 70 mm from both the reference planes and the point Q is towards the reference planes. Draw the projections. **25 Marks**

OR

1. A hexagonal lamina of sides 25 mm rests on one of its sides on VP. The lamina Makes 45^0 to VP and the side on which it rests makes 45^0 to HP. Draw its projections. **25 Marks**

2. A cube of 40 mm sides rests on HP on an edge which is inclined to VP at 30^0. Draw the projections when the lateral square face containing the edge on which it rests makes an angle of 50^0 to HP. **45 Marks**

3. A right cone of 55 mm diameter of base and 75 mm height Stands on its base on HP. It is cut to the shape of a truncated cone with its truncated surface inclined at 45^0 to the axis lying at a distance of 40 mm from the apex of the cone. Open the development of the lateral surface of the truncated cone. **30 Marks**

OR

3. A Sphere of 60 mm is placed centrally on the top face of a hexagonal prism side-35 mm and height 50 mm. Draw the isometric projection of the combination. **30 Marks**