CBCS SCHEME

USN

18EGDL15/25

First/Second Semester B.E. Degree Examination, June/July 2023

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 line has its end A 15 mm above HP and 10 mm in front of VP. The end B is 55 mm above HP and the line is inclined at 30^0 to HP. The distance between the end projectors is 50 mm. Draw the projections of the line and determine the true length of the line and inclinations with VP. A line has its end A 15 mm above HP and 10 mm in front of VP. The end B is 55 mm above HP and the line is inclined at 30^0 to HP. The distance between the end projectors is 50 mm. Draw the projections of the line and determine the true length of the line and inclinations with VP. **25 Marks**

OR

1. A regular hexagonal lamina of sides 30 mm is lying in such a way that one of its sides on HP while the side opposite to the side on which it rests is on VP. If the lamina makes 60^0 to HP, draw the projections of the lamina. **25 Marks**

2. A square prism 35 mm sides 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 inclinations with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40^0 and to VP 30^0. **45 Marks**

3. A funnel is made of sheet metal. The funnel tapers from 60 mm to 30 mm diameters to a height of 25 mm and then forms a cylinder with a height of 50 mm. bottom of the funnel is beveled off completely at an angle of 45^0 to axis. Draw the development of the funnel. **30 Marks**

OR

3. A rectangular pyramid of base 40 mm X 25 mm and height 50 mm is placed centrally on a rectangular slab sides 100 mm X 60 mm and thickness 20 mm. Draw the isometric projection of the combination **30 Marks**