

# CBCS SCHEME

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18EGDL15/25

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

## ENGINEERING GRAPHICS

Time: 3 Hours

**(COMMON TO ALL BRANCHES)**

Max. Marks

- 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 AB measuring 80 mm long has the end A in the HP and 25 mm in front of the VP. Its midpoint M is 25 mm above the HP and 40 mm in front of the VP. Draw the projections of the line and determine the inclination of the line with HP and VP. **25 Marks**

**OR**

1. A pentagonal lamina of side 25 mm is having a side both on HP and VP. The corner opposite to the side on which it rests is 15 mm above HP. Draw the top and front views of the lamina. **25 Marks**
2. A hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its edges of the base. Draw the projections of the prism when the axis is inclined to HP at  $45^\circ$  and VP at  $30^\circ$ . **45 Marks**
3. A square prism of base side 30 mm and axis length 50 mm is resting on HP on one of its base with all the vertical faces being equally inclined to VP. It is cut by an inclined plane  $60^\circ$  to HP and perpendicular to VP and is passing through a point on the axis at a distance 45 mm from the base. Draw the development of the lower portion of the prism. **30 Marks**

**OR**

3. A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projections of the combination of solids. **30 Marks**

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