



# CBCS SCHEME

18EGDL15/25

First/Second Semester B.E. Degree Examination, August/September 2020

## 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 AB 80 mm long is inclined to HP at  $30^\circ$  and inclined to VP at  $45^\circ$ . Draw front and top views of the line and determine their lengths. Also measure the perpendicular distance of end B from both HP and VP. One end of the line touches both HP and VP. **25 Marks**

OR

1. An equilateral triangular lamina of 25 mm side lies on one of its side on HP. The lamina makes  $45^\circ$  with HP and one of its medians is inclined at  $40^\circ$  to VP. Draw its projections. **25 Marks**
2. A Pentagonal prism 25 mm side of base and 60 mm axis length rests on HP on one of its edges of the base which is inclined to VP at  $30^\circ$ . Draw the projection of the prism when the axis is inclined to HP at  $40^\circ$ . **45 Marks**
3. A square prism of base 40 mm and axis length 65 mm is resting on HP on 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 15 mm from the top face. Draw the development of the lower portion of the prism. **30 Marks**

OR

3. A cone of base diameter 40 mm and height 50 mm rests centrally over frustum of a pentagonal pyramid of base side 45 mm and top side 35 mm and height 55 mm. Draw the isometric projections of the solids. **30 Marks**