

CBCS SCHEME

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18EGDL15/25

First/Second Semester B.E. Degree Examination, July/August 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 line AB 80 mm long has its end A 20 mm above the HP and 30 mm in front of VP. It is inclined to 30° to HP and 45° to VP. Draw the projections of the line and find apparent lengths and apparent inclinations. 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° and VP at 30° . 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° 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