18EGDL15/25

First/Second Semester B.E. Degree Examination, June 2019

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 25 Marks 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.

OR

- 1. A pentagonal lamina of edges 25 mm is resting on HP with one of its sides 25 Marks such that the surface makes an angle of 60° with HP. The edge on which it rests is inclined at 45° to VP. Draw its projections.
- 2. A hexagonal prism 25 mm sides of base and 50 mm axis length suspended 45 Marks freely from one of its corner. Draw the projections of the prism when the axis appears to be inclined to VP at 45°.
- 3. The inside of the hopper of a flour mill is to be lined with thin sheet. The 30 Marks top and bottom face of the hopper are regular pentagons with each side equal to 30 mm and 22.5 mm respectively. The height of the hopper is 30 mm. draw the shape of the sheet to which is to be cut so as to fit into the hopper.

A cone of base diameter 50 mm and height 40 mm is placed centrally on the top face of a square slab side 80 mm and height 20 mm. Draw the isometric projection of the combination.