

CBCS SCHEME

18EGDL15/25

First/Second Semester B.E. Degree Examination, December 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. The distance between the end projectors through the end points of a line AB is 40 mm. The end A is 20 mm above HP and 15 mm in front of VP. The end B is 45 mm in front of VP. The line AB appears 50 mm long in the front view. Draw the projections. Find the true length of the line and its inclinations with HP and VP.

 25 Marks

OR

- Draw the projections of a circular plate of negligible thickness of 50 mm diameter resting on HP on a point A on the circumference with its plane inclined at 45° to HP and the top view of the diameter passing through the resting point makes 60° with VP.

 25 Marks
- A pentagonal prism of 25 mm sides of base and 50 mm axis length is resting on one of its corners of its base. Draw the projections of the prism when the axis is inclined to HP at 30°.
 The axis appears to be inclined to VP at 45°.
- 3. A Square pyramid of side of base 45 mm altitude 70 mm is resting with its base on HP with the two sides of the base parallel to VP. The pyramid is cut by a section plane which is perpendicular to the VP and inclined at 40° to the HP. The cutting plane bisects the axis of the pyramid. Obtain the development of the lateral surface of the truncated pyramid

30 Marks

OR

A rectangular Pyramid of base 40 mm x 25 mm and height 50 mm is placed centrally on a cylindrical slab of diameter 100 mm and thickness 30 mm. Draw the isometric projection of the combination.
 30 Marks