

CBCS SCHEME

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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 front view of a 90 mm long line which is inclined at 45° to the XY line measures 65 mm. End A is 15 mm above XY Line and is in VP. Draw the projections of the line and find its inclinations with HP and VP. 25 Marks

OR

1. A Regular pentagonal lamina of 25 mm side is resting on one of its sides on HP while the corner opposite to this side touches VP. If the lamina makes an angle of 60° with HP and 30° with VP, draw the projections of the lamina. 25 Marks
2. A pentagonal pyramid 25 mm sides of base and 50 mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° . 45 Marks
3. A Square pyramid of side of base 45 mm, altitude 70 mm is resting with its base on HP with 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

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