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 end B of a line AB is on the horizontal plane, the top view of the line makes an angle of 30^0 with XY line, being 80 mm. The end A is on the vertical plane and 50 mm above the horizontal plane. Draw the top and front views of the line and obtain the true length of the line. Also find the inclinations of the line with the two planes. **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 60^0 with HP and 30^0 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 is inclined to VP at 45^0. **45 Marks**

3. A right cone of 50 mm diameter of base and 75 mm height stand on its base on HP. It is cut to the shape of truncated cone with its truncated surface inclined at 45^0 to the axis lying at a distance of 40 mm from the apex of the cone. Obtain the development of the lateral surface of the truncated cone. **30 Marks**

OR

3. A Regular pentagonal prism of base edge 30 mm and axis 60 mm is mounted centrally over a cylindrical block of 80 mm diameter and 25 mm thick. Draw isometric projection of the combined solids. **30 Marks**