CBCS SCHEME

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18EGDL15/25

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

ENGINEERING GRAPHICS

(COMMON TO ALL BRANCHES)

Time: 3 Hours 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.

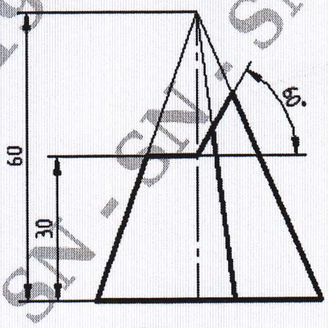
1. A line has one end 30 mm in front of VP and 15 mm above HP and the other end is 15 mm in front of VP and is above HP. The length of the line 60 mm in the top view is 40 mm. Draw the two views of the line and obtain the inclination of the line with HP and VP. **25 Marks**

OR

1. A circular lamina inclined to the VP appears in the front view as an ellipse of major axis 60 mm and minor axis 30 mm. The major axis is parallel to both HP and VP. One end of the minor axis is in both the HP and VP. Draw the projections of the lamina and determine the inclination of the lamina with the VP. **25 Marks**

2. A pentagonal prism 25 mm sides of base and 60 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 40^0 and to VP at 30^0. **45 Marks**

3. A pentagonal pyramid 30 mm sides, with a side of base perpendicular to VP. Draw the development of the lateral surfaces of the retained portion of the pyramid shown by the dark lines in the following figure.



30 Marks

OR

3. Draw isometric projection of a hexagonal prism of side of base 40 mm and height 60 mm with a right circular cone of base 40 mm as diameter and altitude 50 mm, resting on its top such that the axes of the solids are collinear. **30 Marks**