CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   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. Draw the projections of a line AB 100 mm long inclined at 45^0 to VP and 30^0 to HP. One end of the line is 20 mm above HP and in the VP, also determine the Apparent length and inclinations.   **25 Marks**

OR

1. A pentagonal lamina having edges of 25 mm is placed on one of its corners on VP such that the surface makes an angle 30^0 with VP and perpendicular bisector of the edge passing through the corner on which the lamina rests appears to be inclined at 30^0 to HP. Draw the top and front views of the lamina.   **25 Marks**

2. A Square prism 35 mm sides of base and 60 mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40^0 and appears to be inclined to VP at 45^0.   **45 Marks**

3. A square pyramid base 40 mm side and axis 65 mm long has its base on HP and all the edges of the base are equally inclined to VP. It is cut with an inclined section plane so as the truncated surface is at 45^0 to its axis, bisecting it. Draw the development of the truncated pyramid.   **30 Marks**

OR

3. A hemisphere of 40 mm diameter is supported co-axially on the vertex of a cone of base diameter 60 mm and axis length 50 mm. The flat circular face of the hemisphere is facing upside. Draw the isometric projection of the combination of solids.   **30 Marks**