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. A straight line PQ 65 mm long is inclined at 45° to HP and 30° VP. The point P is 70 mm from both the reference planes and the point Q is towards the reference planes. Draw the projections.

 25 Marks

OR

- A hexagonal lamina of sides 25 mm rests on one of its sides on VP. The lamina Makes 45° to VP and the side on which it rests makes 45° to HP. Draw its projections.
 25 Marks
- 2. A cube of 40 mm sides rests on HP on an edge which is inclined to VP at 30°. Draw the projections when the lateral square face containing the edge on which it rests makes an angle of 50° to HP.

 45 Marks
- 3. A right cone of 55 mm diameter of base and 75 mm height Stands on its base on HP. It is cut to the shape of a truncated cone with its truncated surface inclined at 45° to the axis lying at a distance of 40 mm from the apex of the cone. Open the development of the lateral surface of the truncated cone.

 30 Marks

OR

3. A Sphere of 60 mm is placed centrally on the top face of a hexagonal prism side-35 mm and height 50 mm. Draw the isometric projection of the combination.

30 Marks