USN ☐☐☐☐☐☐☐☐☐☐

18EGDL15/25

First/Second Semester B.E. Degree Examination, Jan./Feb. 2021

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. One end of a line is 30 mm in front of VP and 30 mm above HP .The line is inclined at 40^0 to HP and its top view measuring 60 mm, is inclined at 50^0 to XY. Draw the projections of the line and determine true length and inclination with VP. **25 Marks**

OR

1. A rectangular plate of negligible thickness of size 35 mm X 20 mm has one of its shorter edges in VP with that edge inclined at 40^0 to HP. Draw the top view if its front view is a square of side 20 mm. **25 Marks**

2. A hexagonal pyramid of 25 mm sides of base and 50 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 pyramid when the axis of the pyramid is inclined to HP at 40^0 and to VP at 30^0. **45 Marks**

3. A square pyramid of 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 by an inclined section plane so as the truncated surface is at 45^0 to its axis and bisecting it. Draw the development of the truncated pyramid. **30 Marks**

OR

3. A cone of base diameter 50 mm and height 60 mm is placed centrally on an equilateral triangular prism of side 100 mm and 20 mm thick. Draw isometric projection of the combination. **30 Marks**