

CBCS SCHEME



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18EGDL15/25

First/Second Semester B.E. Degree Examination, August/September 2020

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 top view PQ of a straight line is 70 mm and makes an angle of 60° with XY line. The end Q is 10 mm in front of VP and 30 mm above HP. The difference between the distances of P and Q above the HP is 45 mm. Draw the projections. Determine its true length and true inclinations with HP and VP. **25 Marks**

OR

1. A 30° - 60° set square of 60 mm longest side is so kept such that the longest side is in HP makes an angle of 30° with VP. The Set Square itself is inclined at 45° to HP. Draw the projections of the Set Square. **25 Marks**
2. A Square prism 35 mm side 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 45° and VP at 30° . **45 Marks**
3. A rectangular prism of base side 25 mm X 40 mm and axis length 65 mm is resting on HP on its base with the longer side of base inclined at 30° VP. It is cut by a plane inclined at 40° to HP and perpendicular to VP and passes through the extreme left corner of base. Draw the development of the lateral surface of the remaining portion of the prism. **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 the isometric projection of the combination. **30 Marks**