CBCS SCHEME

18EGDL15/25

First/Second Semester B.E. Degree Examination, June 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.

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1. Draw the projections of a line PQ and find its true length and inclinations when the line is inclined at 30° to HP and 45° to VP. The line is having one of its ends 15 mm above HP and 20 mm in front of VP. The distance between the end projectors on the XY line is 60 mm. **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, making 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 pentagonal prism 25 mm sides of base and 60 mm axis length rests on HP on one of its edges of the base which is inclined to VP at 30°. Draw the projections of the prism when the axis is inclined to HP at 40°. **45 Marks**

3. A rectangular prism of base 30 mm X 20 mm and height 60 mm rests on HP on its base with the longer base side inclined at 40° to VP. It is cut by a plane inclined at 45° to HP, perpendicular to VP and bisects the axis. Draw the development of the lateral surface of the prism. **30 Marks**

OR

3. A regular pentagonal prism of base edge 30 mm and axis 60 mm is mounted centrally over a cylindrical block of 80 mm diameter and 25 mm thick. Draw isometric projection of the combined solids. **30 Marks**

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