CBCS SCHEME

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. A point P is 40 mm above HP and 20 mm in front of VP another point Q is 20 mm above HP and 50 mm in front of VP. The top view of line PQ is inclined at 30° to XY. Draw the projections.   **25 Marks**

OR

1. The front view of a rectangular lamina of sides 30 mm X 20 mm is square of 20 mm sides. Draw the projections and determine the inclinations of the surface of the lamina with HP and VP.   **25 Marks**

2. A hexagonal prism 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 inclinations with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and to VP at 30°.   **45 Marks**

3. A vertical cylinder of base diameter 50 m and axis length 60 mm is cut by a two planes which are perpendicular to VP and inclined at 45° to HP and passing through either side the centre point of the top face. Draw the development of the lateral surface of the cylinder.   **30 Marks**

OR

3. A sphere of diameter 50 mm rests centrally on top of a cube of sides 50 mm. Draw the isometric projections of the combination of solids.   **30 Marks**

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