

First/Second Semester B.E. Degree Examination, December 2016

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks: 80

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- 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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Q.No.1 a. A point 20 mm below the reference XY line is the top view of three points 'P', 'Q' and 'R', 'P' is 20 mm below HP, 'Q' is 35 mm above HP and 'R' is on HP. Draw the projections of the three points and state their positions and quadrants in which they are situated. **10 Marks**

b. A line AB 100 mm long measures 80 mm in front view and 70 mm in top view the midpoint M of the line is 40 mm from both HP and VP. Draw its projections. Find its inclinations. **15 Marks**

OR

Q.No.1 A circular lamina inclined to the VP appears in the front view as an ellipse of major axis 60 mm and minor axis 30 mm. the major axis is parallel to both HP and VP. One end of the minor axis is in both HP and VP. Draw the projections of the lamina and determine the inclination of the lamina with the VP. **25 Marks**

Q.No.2 A hexagonal pyramid 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 pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45° . **30 Marks**

Q.No.3 Draw the development of the lateral surface of a funnel consisting of a cylinder and a frustum of a cone. The diameter of the cylinder is 20 mm and top face diameter of the funnel is 80 mm. The height of frustum and cylinder is equal to 60 mm and 40 mm respectively. **25 Marks**

OR

Q.No.3 A hemisphere diameter 70 mm is placed on the ground on its curved surface. A cone base diameter 70 mm and height 70 mm is placed centrally on it. Draw the isometric projection of the combination. **25 Marks**

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