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

## COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours

**(COMMON TO ALL BRANCHES)**

Max. Marks: 80

**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.

- Q.No.1 a.** Draw the projections of the following points on the same XY line, **10 Marks** keeping constant distance between each projector. Name the quadrants in which they lie.
- A – 30 mm above HP and 35 mm in front of VP.
  - B – 35 mm above HP and 40 mm behind VP.
  - C – 40 mm above HP and on VP.
  - D – 35 mm below HP and 30 mm in front of VP.

- b.** A line PQ measures 80 mm in length. The point P is above HP and in front of VP by 10 mm and 15 mm respectively. The distance between the end projectors is 50 mm. The line is inclined to VP by  $30^\circ$ . Draw the projections of the line and specify its true inclination with HP. **15 Marks**

**OR**

- Q.No.1** A hexagonal lamina of sides 25 mm rests on one of its sides on VP. The lamina makes  $45^\circ$  to VP and the side on which it rests makes  $45^\circ$  to HP. Draw its projections. **25 Marks**

- Q.No.2** A pentagonal pyramid 25 mm sides of base and 50 mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at  $45^\circ$ . **30 Marks**

- Q.No.3** A vertical cylinder of base diameter 50 mm and axis length 60 mm is cut by a two planes which are perpendicular to VP and inclined at  $45^\circ$  to HP and passing through either side the centre point of the top face. Draw the development of the lateral surface of the cylinder. **25 Marks**

**OR**

- Q.No.3** The frustum of a square pyramid of sides 40 mm, top face side of 20 mm and height 60 mm rest on the center of the top of a square block of side 60 mm and height 20 mm. The base edges of the pyramid are parallel to the top edges of the square block. Draw the isometric projections of the combination of solids. **25 Marks**

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