

30/05/2012 – 11.30am to 2.30pm

USN

--	--	--	--	--	--	--	--	--	--

10CED14 / 24

First / Second Semester B.E. Degree Examination, May / June 2012

COMPUTER AIDED ENGINEERING DRAWING

Time: 3 Hours

(COMMON TO ALL BRANCHES)

Max. Marks: 100

Note: 1. Answer three full questions
3. Draw to actual scale

2. Use A4 sheets supplied
4. Missing data, if any, may be suitably assumed

- 1 **Q1.a) i.** Draw the projection of the following points on the same XY line keeping convenient distance between each projectors. Name the quadrants in which they lie.

A - 30 mm above HP & 35 mm in front of VP.

B - 35 mm above HP & 40 mm behind VP.

C - 40 mm above HP & on VP.

D - 35 mm below HP & 30 mm in front of VP.

(10 Marks)

- 76 **ii.** A line has one ends 30 mm in front of VP and 15 mm above HP and the other end is 15 mm in front of VP and is above HP. Length of the line is 60 mm. Top view of the line is 40 mm long. Draw the two views of the line and obtain the inclination of the line with HP and VP.

(20 Marks)

OR

- 139 **b)** A hexagonal lamina of sides 30 mm is resting on HP with one of its corners in VP and its surface inclined at an angle of 30° with VP. The diagonal passing through the corner which is in VP appears to be inclined at 40° to HP. Draw the projections of the lamina.

(30 Marks)

- 171 **Q2.** A pentagonal pyramid of 25 mm sides of base 50 mm axis length rests on HP on one of its edges of base. Draw the projections of the pyramid when the axis is inclined to HP at 45° VP at 30° .

(40 Marks)

- 221 **Q3.a)** A square pyramid of 25 mm base edge and 50 mm height rests on HP with all of its base edges equally inclined to VP. It is cut by a plane perpendicular to VP and inclined to HP at 60° , passing through extreme right corner of base. Draw the development of the lateral surface of the pyramid.

(30 Marks)

OR

- 252 **b)** A hemisphere of 40 mm diameter is supported co-axially on the vertex of a cone of base diameter 60 mm and axis length 50 mm. The flat circular face of the hemisphere is facing upside. Draw the isometric projection of the combination of solids.

(30 Marks)