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1.4CED14

First Semester B.E. Degree Examination, November 2014

## COMPUTER AIDED ENGINEERING DRAWING

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.

a. A point 30 mm above XY line is the front view of three points P, Q and R. The top view of R is 40 mm behind VP, the top view of Q is on XY line and top view of P is 45 mm in front of VP. Draw the projections of the points & state the quadrant in which the points are situated. (10 Marks)

b. The distance between the end projectors through the end points of a line AB is 60 mm. The end A is 10 mm above HP and 20 mm in front of VP. The end B is 35 mm in front of VP. The line AB appears 70 mm long in the front view. Complete the projections, Find the true length of the line and its inclinations with HP and VP. (20 Marks)

1. A hexagonal lamina of sides 40 mm is resting on HP with one of its corners in VP and its surface inclined at an angle of  $30^\circ$  with VP. The diagonal passing through that corner which is in VP appears to be inclined at  $40^\circ$  to HP. Draw the projections of the lamina. (30 Marks)

2. A square pyramid with 35 mm sides of base and 60 mm axis length is suspended freely from a corner of its base. Draw the projections of the pyramid when the axis appears to be inclined to VP at  $45^\circ$ . (40 Marks)

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3. A regular pentagonal prism of height 60 mm and base edge 30 mm rests with its base on HP. The vertical face closest to VP is  $30^\circ$  to it. Draw the development of the truncated prism with its truncated surface inclined at  $60^\circ$  to its axis and bisecting it. (30 Marks)

or

3. A square prism base side 40 mm, height 50 mm is placed centrally on a cylindrical slab of diameter 100 mm and thickness 30 mm. Draw the isometric projection of the combination. (30 Marks)