

30/05/2012 – 2.30pm to 5.30pm

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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

- 23 **Q1.a) i.** A point is lying on VP, 20 mm below HP, and 30 mm behind / in front / from LPP. Draw its projections and name the side view. (10 Marks)
- 94 **ii.** The end A of the line is in HP and 25 mm in front of VP. The End B is 25 mm in front of VP and 50 mm above HP. The distance between end projectors when measured parallel to line of intersection of HP and VP is 65mm. Draw the projections of the line AB and determine its true length and true inclinations with HP and VP. (20 Marks)

OR

- 122 **b)** A Pentagonal lamina of sides 25 mm is resting on one of its edges on HP with the corner opposite to that edge touching VP. The edge is parallel to VP and the corner, which touches VP is at a height of 15mm above HP. Draw the projections of the lamina and determine the inclinations of the lamina with HP and VP and the distance at which the parallel edge lies from VP. (30 Marks)
- 156 **Q2.** A pentagonal prism 25 mm side of base and 60 mm axis length rests on HP on one of its edges of base. Draw the projections of the prism when the axis is inclined to HP at 40° and VP at 30° (40 Marks)
- 210 **Q3. a)** Draw the development of the truncated portion of the lateral faces of a pentagonal prism of 20 mm sides of base and 50 mm height standing vertically with one of its rectangular faces parallel to VP and nearer to it so as to produce a one piece development. The inclined face of the truncated prism is 30° to its axis and passes through the right extreme corner of the top face of the prism. (30 Marks)

OR

- 261 **b)** Draw the isometric projection of a hexagonal prism of side of base 40 mm and height 60 mm with a right circular cone of base 40 mm as diameter and altitude 50 mm resting on top such that the axes of both the solids are collinear. (30 Marks)