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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

41 **Q1. a) i.** A point 20 mm below the reference XY line represents 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 & quadrants in which they are situated. **(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

111 **b)** The top view of a square lamina of side 30mm is a rectangle of sides 30mm x 20 mm with the longer side of the rectangle being parallel to both HP and VP. Draw the top and front views of the square lamina. What is the inclination of the surface of the lamina with HP and VP? **(30 Marks)**

179 **Q2.** A pentagonal pyramid 25 mm sides of base and 50 mm axis length is suspended freely from a corner of its base. Draw the projections when the axis appears to be inclined to VP at 45° . **(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

271 **b)** A square prism base side 40 mm, height 50 mm is placed centrally on a rectangular slab of sides 100 mm x 60 mm and thickness 20 mm. Draw the isometric projection of the combination. **(30 Marks)**