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   2. Use A4 sheets supplied
       3. Draw to actual scale   4. Missing data, if any, may be suitably assumed

Q1. i) A point A is 20mm above HP and in the first quadrant. Its shortest distance from the X-Y line is 40mm. Draw the projections. Determine its distance from VP
[10 Marks]

ii) One end of a line is 30mm in front of VP and 30mm above HP. The line is inclined at 40° to HP and its top view measuring 60mm is inclined at 50° to the X-Y line. Draw the projections of the line and determine true length and inclination with VP.
[20 Marks]

OR

Q1. A rectangular lamina of 35mm X 20mm rests on HP on one of its shorter edges. The lamina is rotated about the edge on which it rests till it appears as a square in the top view. The edge on which the lamina rests is inclined at 30° to VP. Draw its projections and find its inclination with HP.
[30 Marks]

Q2. A tetrahedron of 55mm sides rests on one of its corners such that an edge containing that corner is inclined to HP at 50° and VP at 30°. Draw its projections.
[40 Marks]

Q3. A regular pentagonal pyramid of side of base 35mm and altitude 65mm has its base on HP with a side of base perpendicular to VP. The pyramid is cut by a section plane which is perpendicular to VP and inclined at 30° to HP. The cutting plane meets the axis of the pyramid at a point 30mm below the vertex. Obtain the development of the remaining part of the pyramid.
[30 Marks]

OR

Q3. Following Figure 1 shows the front and side views of a solid. Draw the isometric projection of the solid.
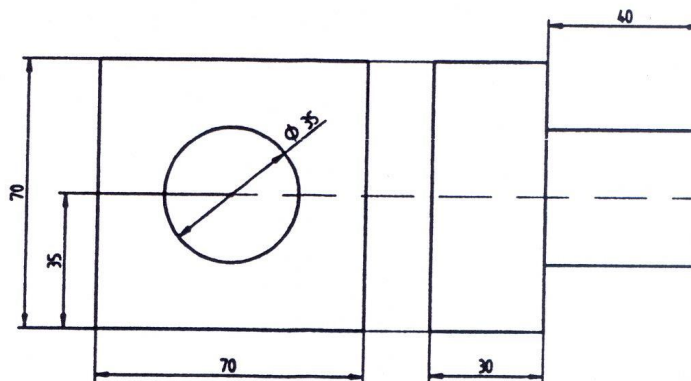[30 Marks]

FIG.1