Code: AE1T6, CE1T6, ME1T5

I B.Tech - I Semester – Regular Examinations February - 2014

ENGINEERING DRAWING
(Common to AE, CIVIL, ME)

Duration: 3 hours   Marks: 5x14=70

Answer any FIVE questions.   All questions carry equal marks

1. The area of a field is 50,000 sq m. The length and breadth of the field, on the map is 10cm and 8 cm respectively. Construct a diagonal scale which can read upto one metre. Mark the length of 235 metre on the scale. What is the R.F. of the scale?   14 M

2. Construct a cycloid having rolling circle diameter as 50mm for one revolution. Draw a normal and tangent to the curve at a point 35 mm above the directing line.   14 M

3. a) The end A of a line AB of 100 mm long is in the H.P. , while the end B is in the V.P. The line is equally inclined to both HP and VP. Draw its projections.   7 M

   b) A line PQ of 70 mm long is resting in both H.P. and V.P. Draw its projections.   7 M

4. Draw the projections of a circle of 75 mm diameter having the end A of the diameter AB in the H.P., the end B in the V.P., and the surface is inclined at 30^0 to the H.P. and 60^0 to the V.P.   14 M

5. A solid right circular cone of base diameter 50 mm and axis 50 mm long is freely suspended from a point on the periphery of base. Draw its projections when the axis is parallel to VP.   14 M

6. A square pyramid, base 40 mm side and axis 65 mm long, has its base on the H.P. and all the edges of the base are equally inclined to the V.P. It is cut by a section plane perpendicular to the V.P., inclined at 45^0 to the H.P. and bisecting the axis. Draw its sectional top view, sectional side view and true shape of its section.   14 M

7. A cube of 40 mm side rests centrally on a square block of 60 mm edges and 20 mm thick. Draw the isometric projections of the two objects with the edges of the two blocks mutually parallel to each other.   14 M

8. Draw the front view, top view and side view of the block shown below. 14 M