representing bee decimeters and 0.5 decimeters.

ENGINEERING GRAPHICS - 2- 2011

(Common for Group II branches)

(Effective from the admitted batch of 2006-2007)

Part A is compulsory. Answer any FOUR question from Part-B. Part-A is to be answered on the main answer book and Part-B on the drawing sheet. All questions carry equal marks. Assume the missing data if any suitably.

PART - A

1. a) What is a conic?
   b) What are cycloidal curves?
   c) What is Visual Ray inspection?
   d) Define an involute.
   e) What are auxiliary planes?
   f) What are traces of aline?
   g) What is Rectangular hyperbola?

PART – B

2. Draw the perspective view of a pentagonal prism, lying on the ground plane on one of the its rectangular faces, the axis being inclined at 30o to the picture plane, and a corner of the base touching the picture plane. The station point is 6.5 cm in front of the picture plane, and lies in a central plane which bisects the axis. The horizon is at the level of the top edge of the prism.

3. A fixed points is 75 mm from a fixed straight line. Draw the locus of a point P moving such a way that its distance from the fixed straight line is a) twice its distance from the fixed point; (B) equal to its distance from the fixed point. Name the curves.
4. A frustum of a wuare pyramid has its base 50 m side, top 25 mm side and height 75 mm. Draw the development of its lateral surface.
5. A vertical square prism, base 50mm side, has a face inclined at 30o to the to the V.P. It has a hole of 65 mm diameter drilled through it. The centre line of the hole is parallelto both the H.P. and the V.P. and is 5mm away from the axis of the prism. Draw the projections of the prism.
6. Draw the projections of a cone, base 50 mm diameter and axis 75 mm long lying on a generator on the ground with the top view of the axis making an angle of 45o with the vertical plane.
7. A fixed point is 75 mm from a fixed straight line. Draw the locus of a point P moving such a way the its distance from the fixed straight line is equal to its distance from the fixed point. Name the curve.
8. An area of 144 sq cm on a map represents a area of 36 sq km on the field. Find the R.F. of the scale for this map and draw a diagonal scale to show kilometers, hectametres and decameters and to measure upto 10 kilometres. Indicate on the scale a distance of 7 kilometres, 5 hectametres and 6 decametres.