FIRST SEMESTER   **B.Tech. (ALL BRANCHES)**

END SEMESTER EXAMINATION   **NOV-DEC 2010**

ME 117, ENGINEERING GRAPHICS

Time: 3 Hours   *Max. Marks : 70*

Note : (I) Attempt any **FOUR** questions.
   (ii) Viva-voce is compulsory and carries 14 marks.
   (iii) Assume suitable missing data, if any.

Q.1   A line 50 mm long makes angle of 30° with HP and makes an angle 45° with VP. It's end A is 10 mm above the HP and 20 mm in front of VP. Draw the projections of AB, determine it's apparent inclination with the VP and also draw its traces.   (14)

Q.2   A thin sheet in the form of a regular pentagon of 25 mm edge rests on H.P on one of its edges. The plane of sheet is inclined at 45° to the HP while the edge on which it resting inclined to V.P at 30. Draw its Front and Top views.   (14)

Q.3   Draw the projections of a regular pentagonal prism, side of the base 30 mm and 90 mm long, is resting on one of the base edge on horizontal plane and face inclined 45° to V .P. Its axis is parallel to VP.   (14)

Q.4   A right circular cylinder of diameter 30 mm and 65 mm long, is resting on its base. An auxiliary inclined plane inclined at 45° cuts the axis of the cylinder at 15 mm from the top. Draw the sectional top view and true shape of the section.

          (14)

Q.5   Develop the lateral surface of a right circular cone of 50 mm base diameter and axis 60 mm long. It is cut by a cutting plane passing through its one edge inclined at 45° to the H.P. and perpendicular to the V.P.   (14)

Q.6   The figure 1 shows the top and front view of an object. Draw its isometric view.

          (14)