

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD I B.TECH – REGULAR EXAMINATIONS JUNE - 2010 ENGINEERING DRAWING (AERONAUTICAL ENGINEERING)

Time: 3hours

Max.Marks:75

Answer any FIVE questions All questions carry equal marks

- 1.a) Construct a regular pentagon of 25 mm side, by two different methods.
- b) The actual length of 500 m is represented by a line of 15 cm on a drawing. Construct a vernier scale to read upto 600 m. Mark on the scale a length of 549 m.
 [7+8]
- 2. The plan of a straight line, AB is 45 mm long and is inclined at 30° with the reference line. The end, A is in VP and 32 mm above HP. The end, B is 35 mm above HP. Draw the projections of AB, and locate its traces. [15]
- 3. A thin 45° set-square, ABC is placed in the VP with its longest edge, AB (50mm) inclined at 30° to HP. Its surface is rotated about AB till it makes 40° with the VP. Draw the plan and elevation of the set-square in its final position. [15]
- 4. A hexagonal prism, with 30mm side and 70mm height is resting on the HP on one of the edges of its hexagonal base in such a way that the edge is at 60° to VP and the base is at 60° to HP. Draw the projections. [15]
- 5. A right circular cylinder of 75 mm diameter is penetrated by another cylinder of same size. The axis of the penetrating cylinder is parallel to both HP and VP and is 9 mm away from the axis of the vertical cylinder. Draw the projections showing the curves of intersection. [15]
- 6. Draw the isometric view of the object whose front and side views are given. [15]



7. Draw the front view, top view and left view of the given isometric view. All dimensions are in mm. [15]



8. The object shown in figure is placed on its base on the ground with longer edge through P making on angle of 40^0 with the PP. The end P is 5 mm in front of the PP.

The station point is 12 mm to the left of P and 70 mm in front of the PP. The horizon plane is 15mm above the ground plane. Draw the perspective view of the object. [15]


