

R09

Code No: 09A10191

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech I Year Examinations, November/December-2013

ENGINEERING DRAWING

(Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any five questions

All questions carry equal marks

1. The distance between Mumbai and Pune is 180 Km. A car covers this distance in 6 hours. R.F is 1/200000. Draw a comparative scale to measure time up to a single minute. Show the distance traveled by it in 38 minutes. [15]
2. The front view of a line AB 80 mm long measures 55 mm while its top view measures 70 mm. End A is in both HP and VP. Draw the projections of the line and find its inclinations with the reference planes. Also locate the traces. [15]
3. Draw the projections of a regular pentagon of 40 mm side having its surface inclined at 30° to V.P and side on which it rest on V.P makes an angle of 60° with H.P. [15]
4. A square prism of 32 mm side and 100 mm height is lying on its base on HP such that the edges of the base are equally inclined to VP. The prism is cut by a section plane passing through the mid-point of the axis such that the true shape of section is a rhombus of diagonals of 102 mm and 42 mm. Determine the inclination of section plane with HP. [15]
5. A vertical cone of 80 mm diameter and axis 100 long is penetrated by horizontal cylinder of 60 mm diameter and 90 mm long such that its axis is 15 mm behind the axis of the cone at height of 40 mm above its base. Show the lines of intersection when axes of both solids are parallel to V.P. [15]
6. Draw the isometric view by using the following views as shown in figure 1. All dimensions are in mm. [15]

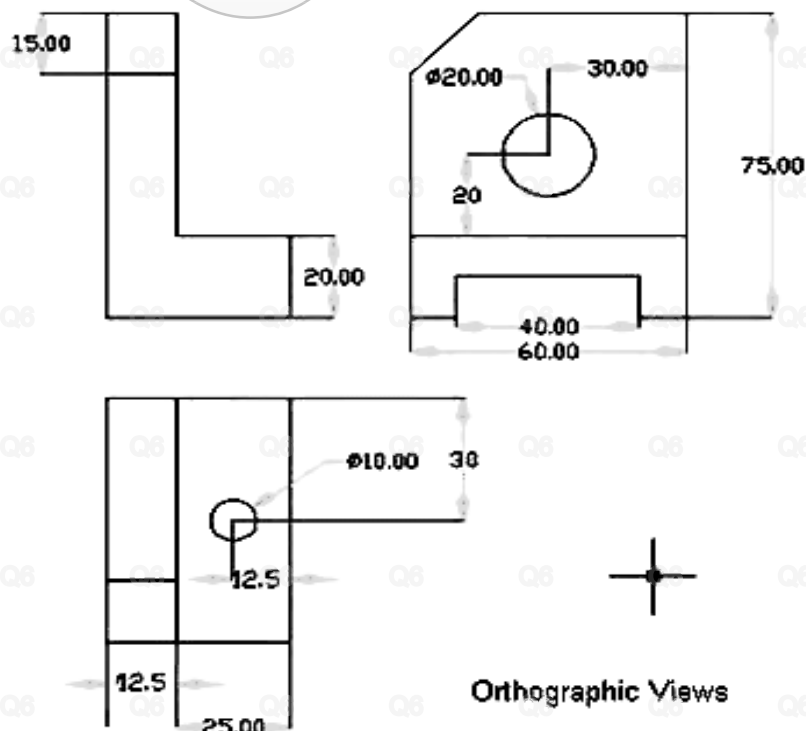


Figure: 1

7. For the isometric view shown in figure 2, draw
 a) Front view (in the arrow direction)
 b) Top view and
 c) Left side view.

All dimensions are in mm.

[15]

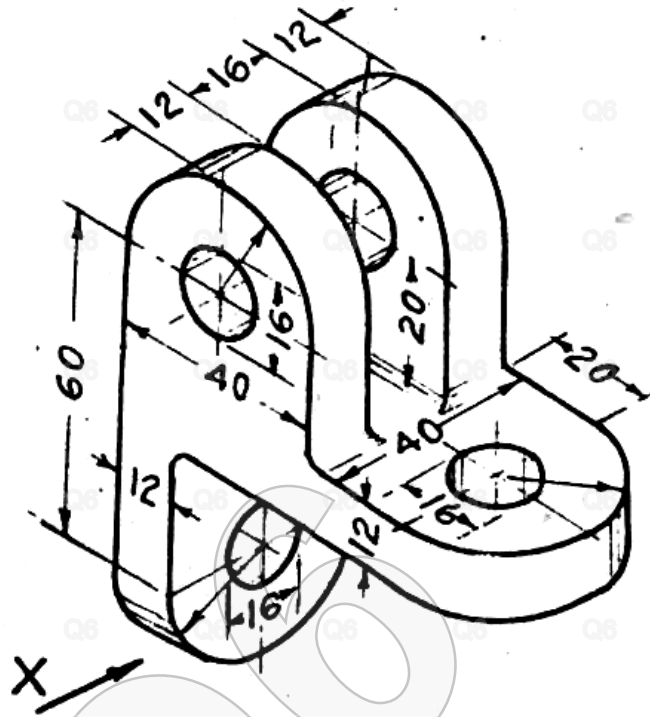


Figure: 2

8. A hexagonal lamina of 25 mm side stands vertically on the ground plane and inclined at 50° to PP. The corner nearest to PP is 20 mm behind it. The station point is 45 mm in front of PP, 50 mm above the ground plane and lies in a central plane which passes through the center of the lamina. Draw the perspective projection.

[15]
