R09

Code No: 09A11291

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech I Year Examinations, November/December-2013
ENGINEERING DRAWING
(Common to IT, BT, MIE, PTME)

Time: 3 hours **Max. Marks: 75**

Answer any five questions
All questions carry equal marks

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1. A flower bed in a botanical garden is elliptical shape with major axis 9m and minor axis 6 m. Draw the profile of the flower bed taking suitable scale. Also, draw a tangent and normal to the curve at any one point on the curve drawn. [15]

2. A line AB, 70 mm long has its end A 20 mm above HP and 30mm infront of VP. It is inclined at 30^0 to HP and 40^0 to VP. Draw the projections. Also draw traces. [15]

3. A hexagonal sheet metal of 25 mm side rests on the HP such that its surface is inclined at an angle of 45^0 to the HP and one of its diagonals is inclined at an angle of 45^0 to the VP. Draw its projections. [15]

4. A cone base 40mm diameter and 60 mm long rests with its base on HP. It is cut by section plane perpendicular to VP, parallel to one of the generators and passing through a point on the axis at a distance of 25 mm from the apex. Draw the sectional top view and true shape of the section. [15]

5. A cylinder of 60 mm diameter and axis 80 mm stands with its base on HP. It is completely penetrated by a horizontal cylinder of 40 mm diameter and 80 mm axis such that their axes bisect each other at right angles. Draw Intersection curve. [15]

6. Draw the isometric projections of the given figure 1. All dimensions are in mm. [15]

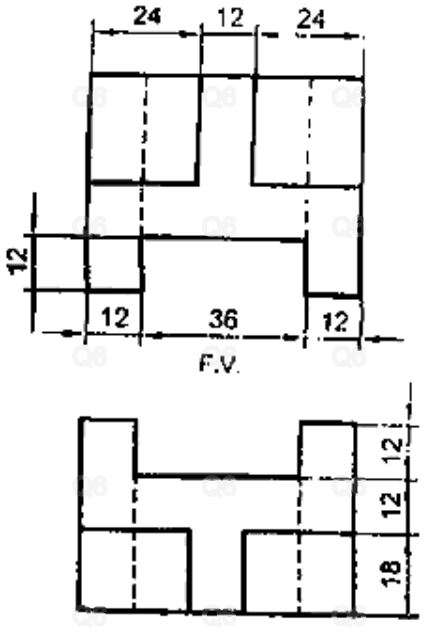

Figure: 1

7. Draw Front view and Right side view along with top view of the Bearing Block as shown in figure 2. All dimensions are in mm. [15]

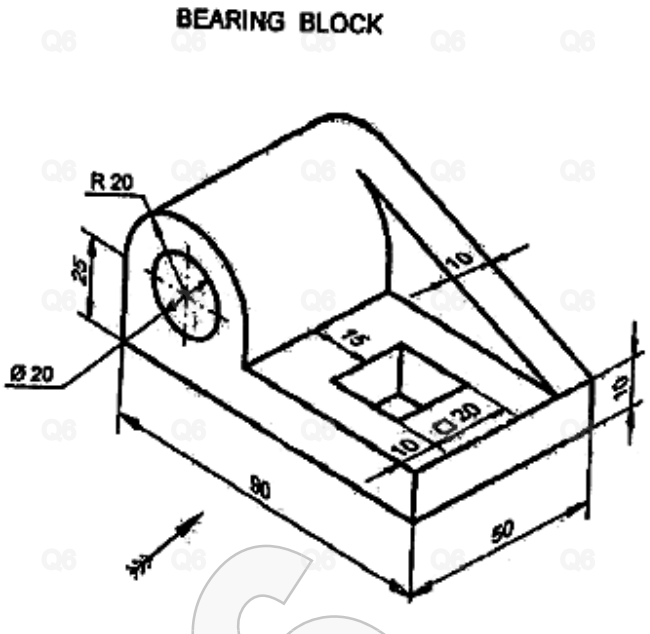

Figure: 2

8. A square prism side of base 40 mm and height 60 mm rests with its base on the ground such that one of its rectangular faces is parallel to and 10mm behind the picture plane. The station point is 30 mm infront of PP, 80 mm above the ground plane and lies in a central plane 45 mm to the right of the centre of the prism. Draw the perspective projection of the square prism. [15]

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