

Code No: 51014

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, May - 2016

ENGINEERING DRAWING

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

1. Construct a scale of R.F.=1/84480 to show miles and furlongs and long enough to measure upto 6 miles. [15]
2. The length of the top view of a line parallel to the V.P. and inclined at 45° to the H.P. is 50 mm. One end of the line is 12 mm above the H.P. and 25 mm in front of the V.P. Draw the projections of the line and determine its true length. [15]
3. A square ABCD of 40 mm side has a corner on the H.P. and 20 mm in front of the V.P. All the sides of the square are equally inclined to the H.P. and parallel to the V.P. Draw its projections and show its traces. [15]
4. A cylinder, 65 mm diameter and 90 mm long, has its axis parallel to the H.P. and inclined at 30° to the V.P. It is cut by a vertical section plane in such a way that the true shape of the section is an ellipse having the major axis 75 mm long. Draw its sectional front view and true shape of the section. [15]
5. A vertical cone, base 75 mm diameter and axis 110 mm long is penetrated by a horizontal cylinder of 50 mm diameter in such a way that both the solids envelope an imaginary common sphere and their axes intersect each other. Draw the projections of the solids when their axes lie in a plane parallel to the V.P. [15]
6. Draw the a) front view b) side view c) top view as shown in figure 1. All dimensions are in mm. [5+5+5]

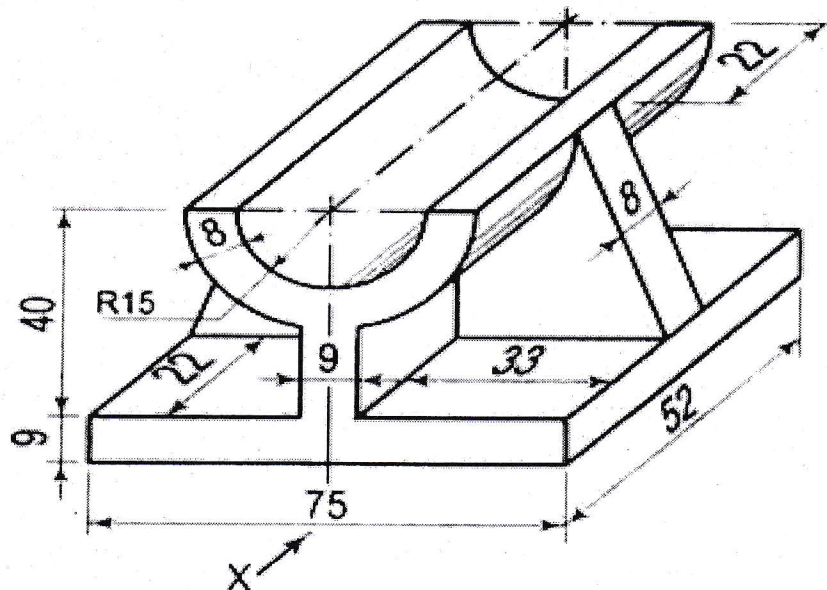


Figure: 1

7. Projections of castings are given. Draw the isometric view of each casting as shown in figure 2. All dimensions are in mm. [15]

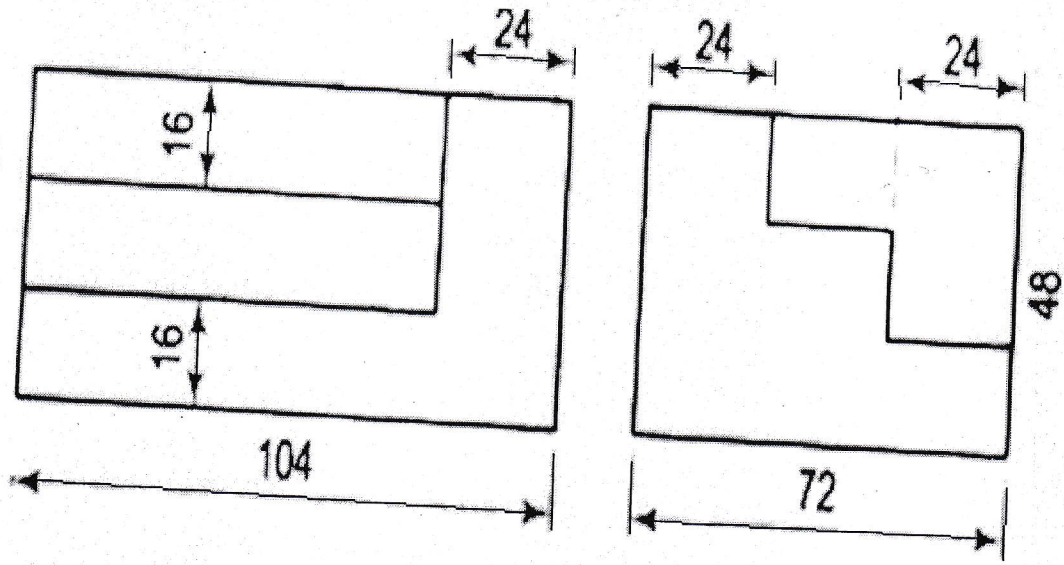


Figure: 2

8. A rectangular block, 30 mm \times 20 mm \times 15 mm, is lying on the ground plane on one of its largest faces. A vertical edge is in the picture plane and the longer face containing that edge makes an angle of 30° with the picture plane. The station point is 50 mm in front of the picture plane, 30 mm above the ground plane and lies in a central plane which passes through the centre of the block. Draw the perspective view of the block. [15]

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