

Code No: 121AH

R15

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year Examinations, August/September - 2016

ENGINEERING DRAWING

(Common to BT, MIE, MIM, PTE, CSE, BME, CST)

Time: 3 hours

Max Marks: 75

Answer any five questions
All questions carry equal marks

1. Construct a diagonal scale of R.F. = $1/4000$ to show meters and long enough to measure up to 500 meters. [15]

OR

2. Construct a regular pentagon of 30 mm side by three different methods. [15]

3. Two points A and B are in the H.P. The point A is 30 mm in front of the V.P. while B is behind the V.P. The distance between their projectors is 75 mm and the line joining their top views makes an angle of 45° with XY. Find the distance of the point B from the V.P. [15]

OR

4. A line AB, 65 mm long has its end A 20 mm above the H.P. and 25 mm in front of the V.P. The ends B are 40 mm above the H.P. and 65 mm in front of the V.P. Draw the projections of AB and show its inclinations with the H.P. and the V.P. [15]

5. Draw the projections of a cylinder of 40 mm diameter and axis 60 mm long resting on H.P. on a point on its base circle with its axis inclined at 30° to H.P. and top view of axis making 45° with V.P. [15]

OR

6. A square pyramid, base 50 mm side and axis 75 mm long, is resting on the H.P. on one of its triangular faces, the top view of the axis making an angle of 30° with the V.P. It is cut by a horizontal section plane, the V.T of which intersects the axis at a point 6 mm from the base. Draw the front view, sectional top view and the development of the sectioned pyramid. [15]

7. Draw the development of the lateral surface of the part P of the cylinder the front views of which are shown in figure 1. All dimensions are in mm. [15]

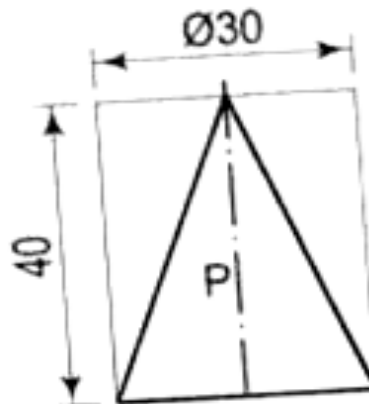


Figure: 1

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8. A square prism of base 50 mm side and height 125 mm stands on the ground with a side of the base inclined at 30° to the V.P. It is penetrated by a cylinder, 50 mm diameter and 125 mm long, whose axis is parallel to both the H.P. and the V.P and bisects the axis of the prism. Draw the projections showing fully the curves of intersection. [15]
9. Projection of a casting is given in figure 2. Draw isometric view of the casting. All dimensions are in mm. [15]

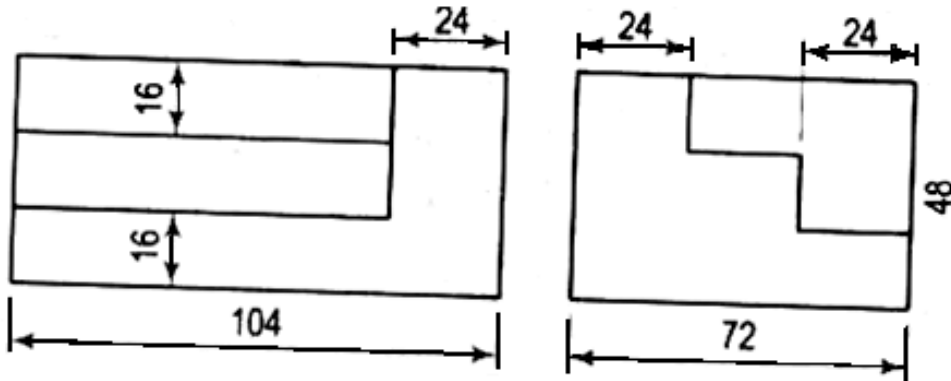


Figure: 2

OR

10. Draw the a) front view b) side view from the left c) top view of the object as shown in figure 3. All dimensions are in mm. [15]

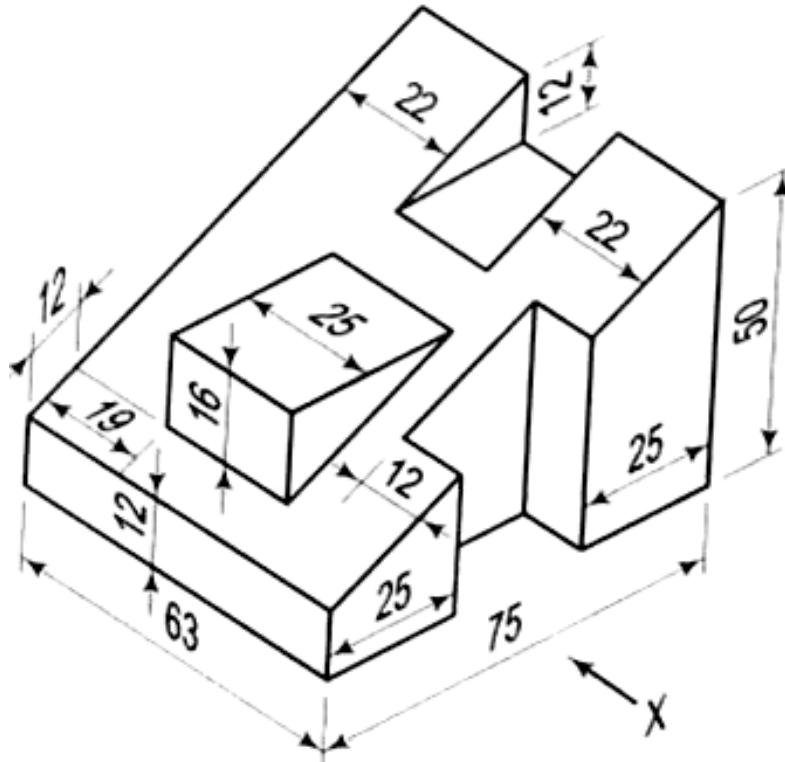


Figure: 3

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