

Code No: 07A10291

Set No. 1

I B.Tech Regular Examinations, May/June 2008

ENGINEERING DRAWING

(Common to Electrical & Electronic Engineering, Electronics & Instrumentation Engineering and Electronics & Computer Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. The vertex of a hyperbola is 65mm from its focus. Draw the curve if the eccentricity is $\frac{3}{2}$. Draw a normal and a tangent at a point on the curve, 75 mm from the directrix. [16]
2. Show by means of a drawing that when the diameter of the directing circle is twice that of the generating circle, the hypocycloid is a straight line. Take the diameter of the generating circle equal to 50mm. [16]
3. (a) A point A is 2.5 cm above the H.P. and 3 cm in front of the V.P. Draw its Projections.
(b) A point A is 2 cm below the H.P. and 4 cm behind the V.P. Draw its Projections.
(c) Two points A and B are in the H.P. The point A is 30mm in front of the V.P., while B is behind the V.P. The distance between their projectors is 75mm 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. [4+4+8]
4. A line AB 120mm long is inclined at 45° to the H.P. and 30° to the V.P. Its mid point C is in V.P. and 20mm above H.P. The end A is in the third quadrant, and B is in the first quadrant Draw the projections of the line. [16]
5. (a) A regular pentagon of 25mm side has one side on the ground. Its plane is inclined at 45° to the H.P. and perpendicular to the V.P. Draw its projections.
(b) Draw the projections of a circle of 5cm diameter, having its plane vertical and inclined at 30° to the V.P. Its centre is 3cm above the H.P. and 2cm in front of the V.P. [8+8]
6. (a) Draw the projections of a hexagonal prism of base 25mm and axis 60mm long, when it is resting on one of its corners of the base on H.P. The axis of the solid is inclined at 45° to H.P.
(b) Draw the projections of a pentagonal prism of base 25mm side and axis 50mm long, when it is resting on one of its rectangular faces on H.P., the axis of the solid is inclined at 45° to V.P. [8+8]
7. Draw the isometric view of a Door-Steps having three steps of 22cm tread and 15cm rise. The steps measure 75cm widthwise. [16]

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8. Draw the following views of the block shown in figure 8. All dimensions are in mm.

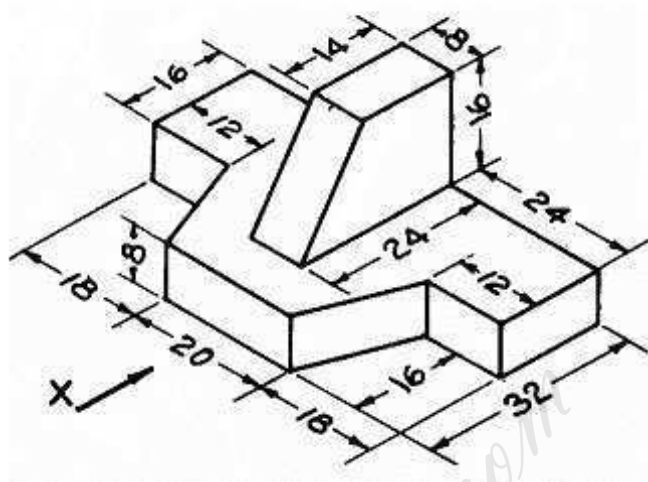


Figure 8

- (a) Front View.
- (b) Top view
- (c) Both side views.

[16]
