

**Subject Code: R10205/R10**

**Set No - 1**

**I B.Tech II Semester Supplementary Examinations Dec./Jan. – 2015/2016**

**ENGINEERING DRAWING**

**(Common to All Branches)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions  
All Questions carry equal marks**

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1. (a) Draw a diagonal scale of 1:4, showing cm and mm and long enough to measure upto 40 cm. Mark on it, a length of 32.7 cm.  
(b) An ellipse has the major axis and minor axis in the ratio of 3:2. Draw the ellipse, when the major axis is 120. Draw a tangent and a normal at any point P on it.  
[8+7]
2. (a) A point A is 50 mm below the H.P. and 12 mm behind the V.P. A point B is 10 mm above the H.P and 25 mm in front of the V.P. The distance between the projectors of A and B is 40 mm. Determine the traces of the line joining A and B  
(b) A line CD of 60 mm long has its end C in H.P and 12 mm behind V.P. The line is inclined at  $45^{\circ}$  to H.P and  $30^{\circ}$  to V.P. Draw its projections.  
[8+7]
3. The front view of a line AB measures 60 mm and makes an angle of  $45^{\circ}$  with XY. A is in H.P and V.T of the line is 15 mm above H.P. The line is inclined at  $30^{\circ}$  to V.P. Draw the projections of AB and determine its true length and inclination with H.P. Also locate its H.T.  
[15]
4. ABCD is a rhombus of diagonals AC = 110 mm and BD = 70 mm. Its corner A is in the H.P and the plane is inclined to the H.P. such that the plane appears to be a square. The plane of diagonal AC makes an angle of  $20^{\circ}$  to the V.P. Draw the projections of the plane and find its inclination with H.P.  
[15]
5. A cylinder of diameter 60 mm and axis 70 mm long, is having its axis inclined at  $45^{\circ}$  to V.P and  $30^{\circ}$  to H.P. Draw its projections.  
[15]
6. Draw the projections of a cone of base 60 mm diameter and axis 70 mm long, resting on a point of rim of the base on H.P, with a generator perpendicular to H.P. The plane containing the axis and the generator is parallel to V.P. Draw the projections of the cone.  
[15]

7. Draw the isometric view of the following figure.1

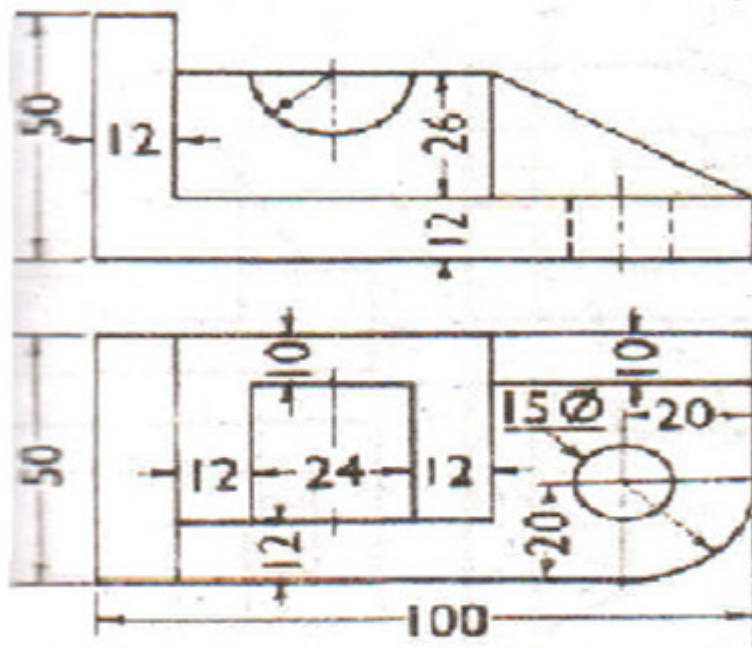


Fig.1 (Note: All dimensions are in mm)

[15]

8. Draw Fig.2 (a) Front view (b) Side view from the right (c) Top view

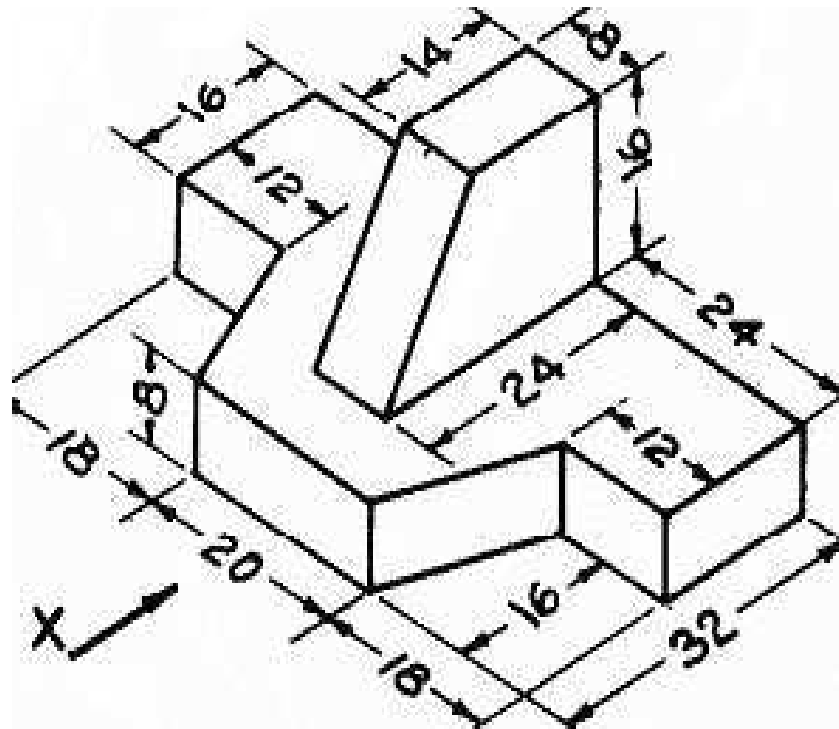


Fig.2 (Note: All dimensions are in mm)

[15]