Subject Code: R13209/R13 **Set No - 1**

I B. Tech II Semester Supplementary Examinations December - 2016

ENGINEERING DRAWING

(Com. to CSE, PCE, IT, CHEM, AE, AME, MM, PE, MTE)

Time: 3 hours **Max. Marks: 70**

Question Paper Consists of **Part-A** and **Part-B**
Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**
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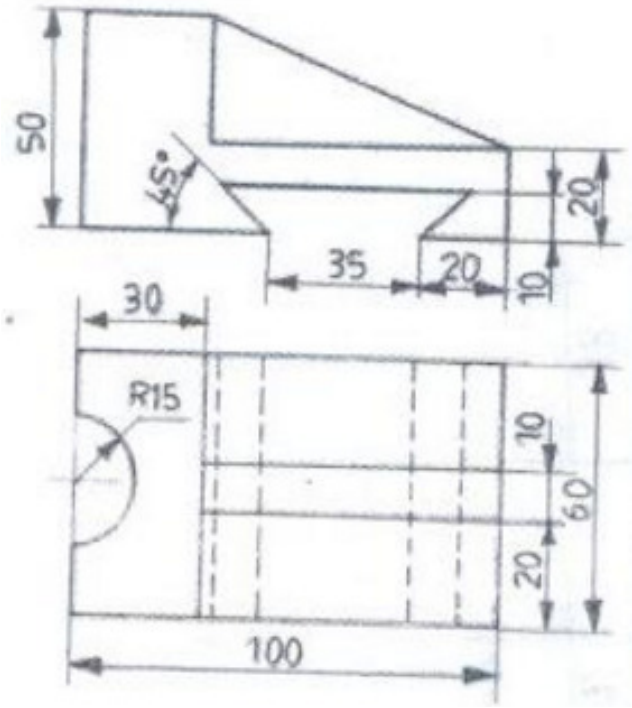
PART-A

1. (a) Draw the isometric view of Figure 1.



Note: All dimensions are in mm.

Figure 1

(b) A tetrahedron of 40 mm side rests with one of its edges on HP and perpendicular to VP. The triangular face containing that edge is inclined at 30^0 to HP. Draw its projections.

[12+10]

PART-B

2. (a) The major axis of an ellipse is 120 mm long and minor axis is 90 mm long. Find the foci and draw the ellipse by arc of circles method. Draw a tangent to the ellipse at a point on it 35 mm above the major axis.
(b) Construct a vernier scale to read distance upto decameter. The R.F of the scale is 1:40000. The scale should be long enough to measure up to 7 km. mark lengths of 3.25 km and 2.32 km on the scale

[8+8]

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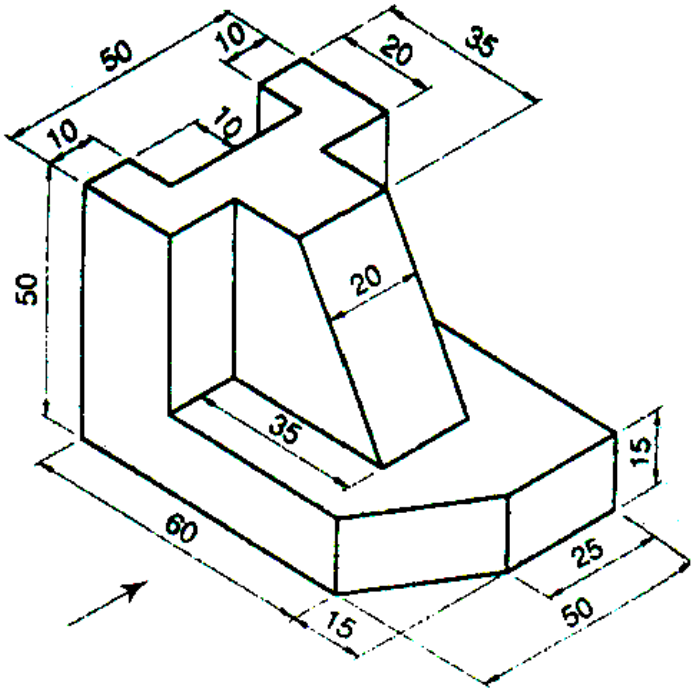
3. (a) The front view of a line 90mm long is inclined at 45^0 to the XY line. Front view measures 65mm long, point A is 15 mm above HP and in VP draw the projection of the line and find its inclination with HP and VP.
   (b) A point 30 mm above XY line is the front view of two points A and B. The top view of A is 40 mm behind VP and the top view of B is 50 mm in front of VP. Draw the projections of the points and state their positions with respect to reference planes [8+8]

4. A straight line AB has its end point A 15 mm in front of the VP while the other end B is 50 mm in front of the VP. The top view of the line is 50 mm long and the HT of the line is 10 mm in front of the VP. Draw the projections of the line if it is inclined at 30^0 to the HP. Also find its VT. [16]

5. A circular plate of 60 mm diameter is vesting on a point of its circumference such that its plane is inclined 30^0 to HP and 450 to VP. Draw the projections of the plane. [16]

6. A hexagonal pyramid of 26 mm side of base and 70 mm height rests on HP on one of its base edges such that the triangular face containing the resting edge is perpendicular to both HP and VP. Draw its projections. [16]

7. Draw the following views for the object shown in figure below. All dimensions are in mm.
   (a) Front view (b) Top view (c) Left Side view. [16]



Note: All dimensions are in mm.