Subject Code: R10205/R10 **Set No - 1**

I B. Tech II Semester Supplementary Examinations December - 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) Construct an ellipse when its major axis is 120mm and the distance between the foci is 108mm by arc of circles method. Draw normal and tangent to the curve at any point on the curve and also determine the length of the minor axis.
   b) Construct a regular hexagon of 40mm side. (10+5)

2. a) A point 30mm above xy line is the plan view of two points P and Q. the elevation of P is 40mm above the H.P. while that of the point Q is 30mmbelow the H.P. Draw the projections of the points and state their position with reference to the principal planes and the quadrant in which they lie.
   b) A line MN 50mm long is parallel to V.P. and inclined at 30^0 to H.P. The end M is 20mm above H.P. and 10mm in front of V.P. Draw the projections of the line. (8+7)

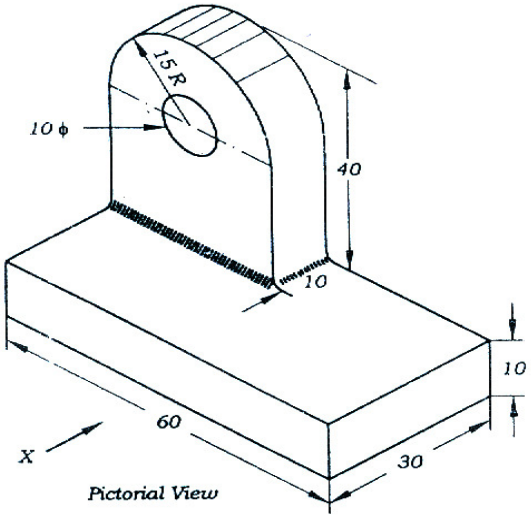
3. A line AB 120mm long is inclined at 45^0 to the H.P. and 30^0 to the V.P. Its midpoint C is in V.P. and 20mm above H.P. The end A is in the third quadrant, and B is in the first quadrant Draw the projections of the line. (15)

4. a) A rectangle of 60 X 40 mm is parallel to H.P. perpendicular to V.P. Draw its projections when one of its shorter side is (i) Perpendicular to V.P. (ii) Parallel to V.P. (iii) Inclined 30^0 to V.P.
   b) A circle of 30mm diameter is perpendicular to H.P and parallel to V.P. Draw its projections. (10+5)

5. A right circular cylinder diameter of base 50mm and length of axis 70 mm rests on HP on its base rim such that its axis is inclined at 45^0 to HP and parallel to the VP. Draw its projections. (15)

6. Hexagonal Pyramid side of base 30 mm and axis 50 mm long rests with one of the corners of its base on H.P. Its axis is inclined at 35^0 to H.P. and parallel to V.P. Draw its projections. (15)

7. Draw the Front View, Top view & Both side views of the isometric figure shown below. All dimensions are in mm. (15)



8. Draw the isometric view of the object whose orthographic projections are shown in figure. (15)