Code.No: 09A12191 | R09 | SET-4

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**
**I B.TECH – REGULAR EXAMINATIONS JUNE - 2010**
**ENGINEERING DRAWING**
**(AERONAUTICAL ENGINEERING)**

**Time: 3hours** **Max.Marks:75**

**Answer any FIVE questions**
**All questions carry equal marks**
**- - -**

1. a) Construct a Heptagon and Pentagon with a common base of side 30mm.
   b) Draw a vernier scale of R.F. = 1.25 to show deci metre, centi metre and milli metre and to measure up to 4 dm. Mark the distances, 2.23 and 2.58 dm on the scale. [7+8]

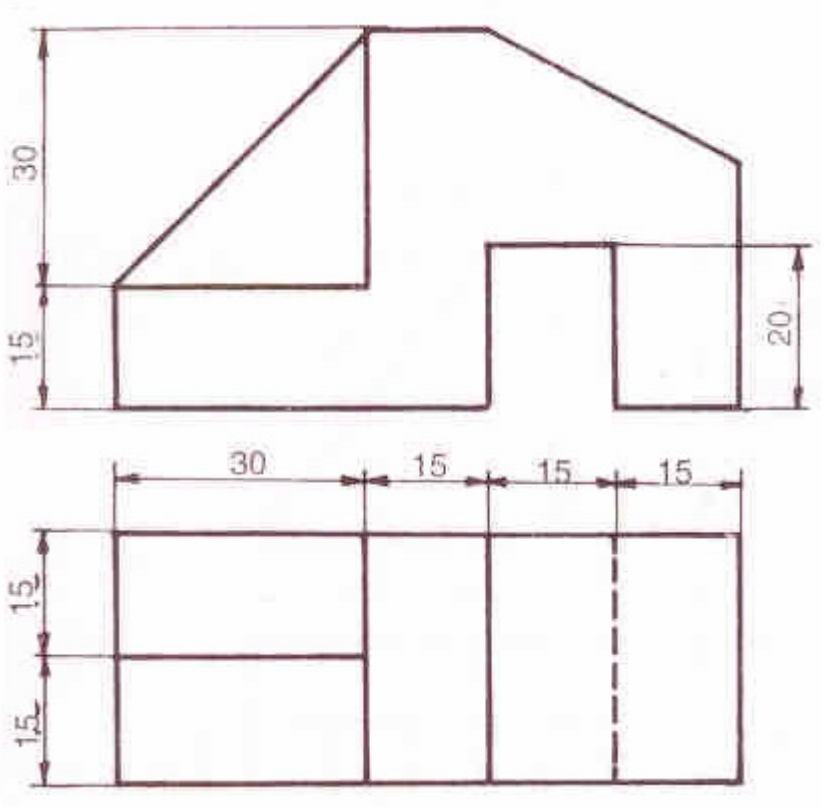
2. A line, AB in the first quadrant. Its end A and B are 20 mm and 60 mm in front of VP respectively. The distance between the end projectors is 75 mm. The line inclined at $30^0$ to the HP and its HT is 10 mm above XY. Draw the projections of AB and determine its true length and VT. [15]

3. A square, ABCD of 50 mm side has its corner in HP and its diagonal, AC inclined at $30^0$ to HP. The top view of the diagonal, AC is inclined at $45^0$ to VP and the other diagonal, BD being parallel to HP. Draw the projections. [15]

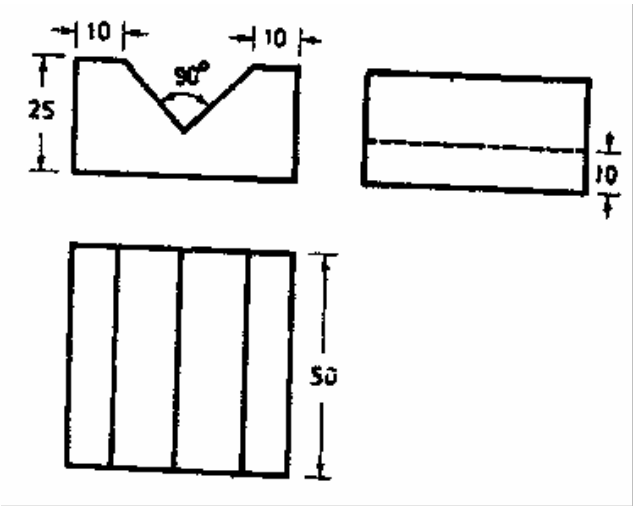
4. A cone, base 75 mm diameter and axis 100 mm long, has its base on the ground. A section plane, parallel to one of the end generators and perpendicular to VP cuts the cone intersecting the axis at a point 75 mm from the base. Draw the sectional top view and true shape of the section. [15]

5. A vertical square prism of base 50 mm having its faces equally inclined to VP is completely penetrated by the horizontal cylinder, the axis of which is parallel to VP and 5 mm away from that of the prism. Draw the projection of the solid \s showing the curves of intersection. The diameter of the cylinder is 40 mm. [15]

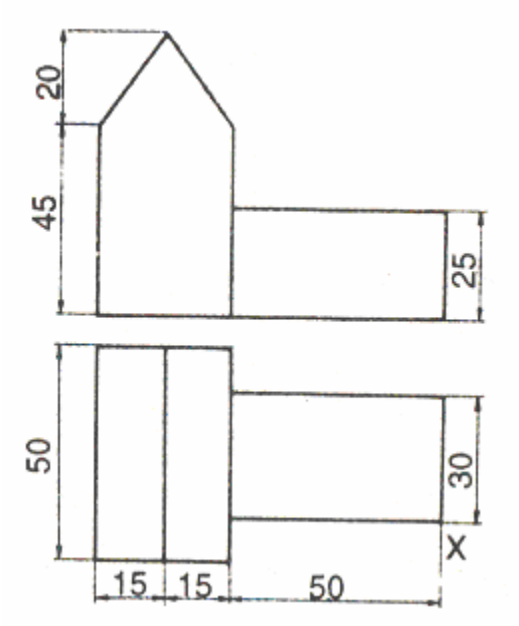
6. Draw the orthographic projections of the following object. All dimensions are in mm. [15]




7. Draw the isometric view of the following object. All dimensions are in mm. [15]




8. The edge x of the object is in contact with the picture plane and the longer vertical face in contact with the edge X makes $30^0$ with the PP. The object itself is resting an its base on the ground. The station point is opposite to the edge X, 80 mm in front of the PP and 40 mm above the ground. Draw the perspective view of the object. [15]


20
45
25
50
30
X
15
15
50

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