Code.No: 09A12191 | R09 | SET-3

**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**
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1.a) Describe a regular Heptagon on a circle of diameter 50 mm.
b) On a building plan, a line of 20 cm long represents a distance of 10 m. Devise a diagonal scale for the plan to read upto 12m, showing metre, decimeter and centimeter. Represent on the scale, the lengths, 6.48 mm and 11.14 mm. [7+8]

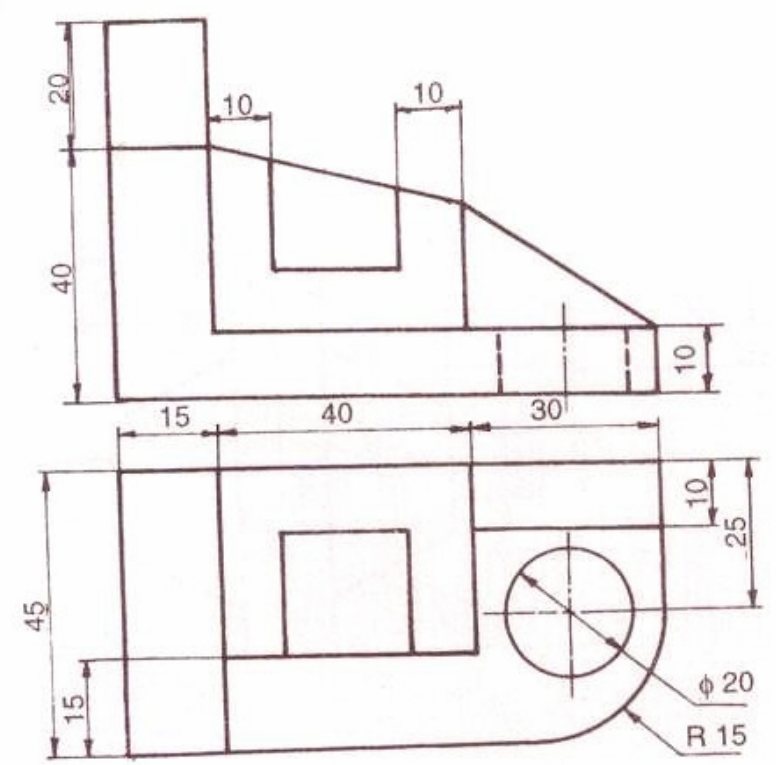
2. A line, AB, 75 mm long is in second quadrant with the end, A in the HP and the end, B in the VP. The line is inclined at $30^0$ to HP and at $45^0$ to VP. Draw the projections of AB and determine its traces. [15]

3. A hexagonal plate of side, 40mm, is resting on a corner in VP with its surface making an angle of $30^0$ with the VP. The front view of the diagonal passing through that corner is inclined at $45^0$ to the line, XY. Draw the projections of the plate using auxiliary plane method. [15]

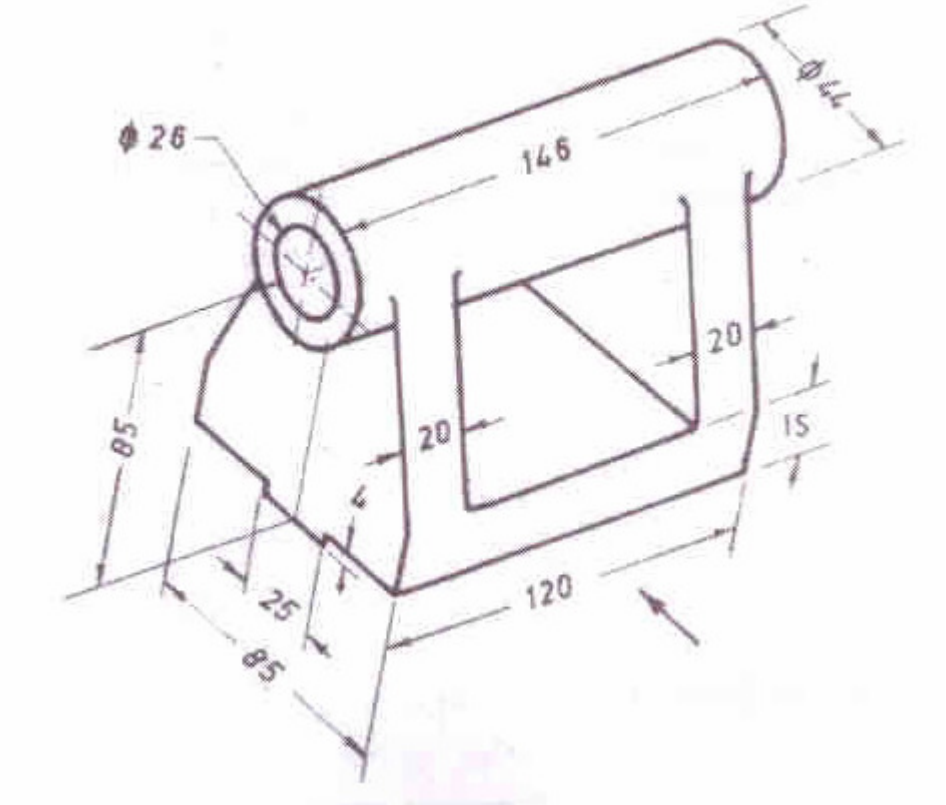
4. A cone, base 75mm diameter and axis 100 mm long, has its base on the ground. A section plane, parallel to one of the end generators and perpendicular to VP cuts the cone intersecting the axis at a point 75mm from the base. Draw the sectional top view and true shape of the section. [15]

5. A vertical square prism of base 50mm 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 projections of the solid\s showing the curves of intersection. The diameter of the cylinder is 40mm. [15]

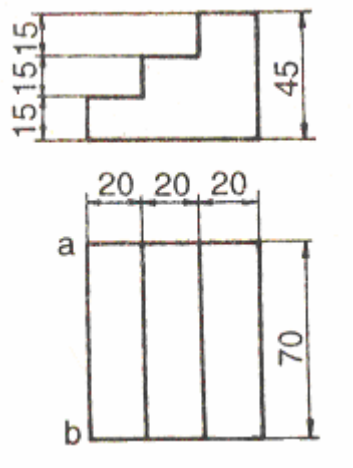
6. Draw the isometric view of the object whose front and top views are given. [15]




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



8. Draw the perspective projection of the steps, given the following data. The bottom corner b is 20 mm behind the PP and 10 mm to the left of the observer. The edge ba is vanishing to the left at 30-to the PP. The eye level of the observer is 60 mm above the ground level and the observer is stationed 80mm in front of the pp.[15]




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