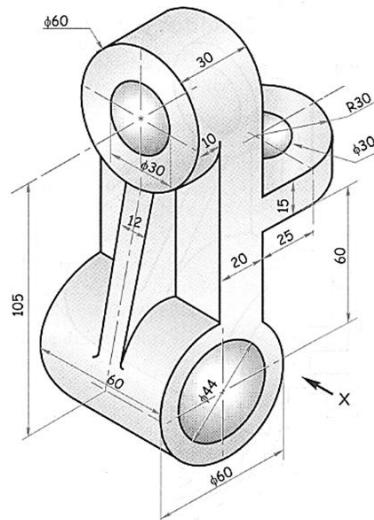


**List of Problems to be solved in AutoCAD Practical**

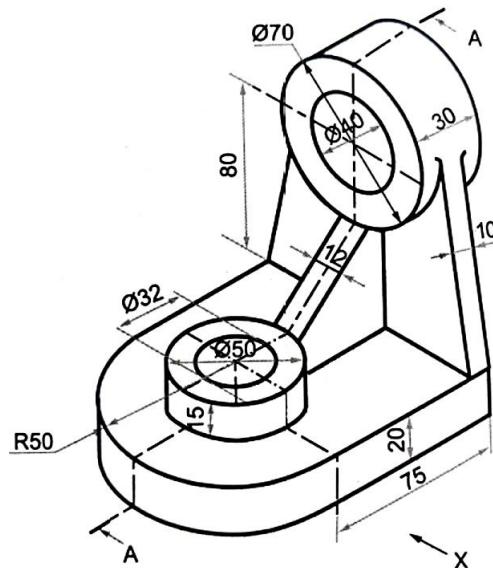
**Sheet No. 1 (Orthographic and Sectional Orthographic Projections)**

**CO 1:** Visualize and draw orthographic projection and sectional views of any 3D object.

- Figure shows pictorial view of object. Draw the following views using the first angle method of projections, a) Plan b) Elevation in the direction of arrow X c) Left Hand Side View.



- Figure shows pictorial view of Object. Draw using first angle method of projections, i) Sectional Front view along A-A; ii) Top View; iii) LHSV.



### **Sheet No. 2 (Projection of Lines & Planes)**

**CO 2:** Visualize and draw projection of lines and planes.

1. A line AB is 110 mm long and inclined at  $30^0$  with HP. Its elevation makes  $40^0$  with XY. Draw its projection if end A is 20 mm above HP and 15 mm in front of VP. Find its inclination with VP.
2. The end of line AB is 15 mm above HP and 20 mm in front of VP. It is 110 mm long and inclined at  $30^0$  to VP. Its plan makes  $40^0$  with XY. Draw its projection and find inclination with HP.
3. Draw the projections of a circular plane of 80 mm diameter resting on HP on one of its circumference point. The plane is inclined to HP such that the plan is an ellipse of 60 mm minor axis. Find the inclination of plane with HP.
4. A pentagonal plate of side 40 mm is held in VP on one of its corner. The surface of plate is inclined at  $40^0$  to VP. Draw the projections.

### **Sheet No. 3 (Projection of Solids)**

**CO 3:** Draw projection of regular

1. A pentagonal prism, having an edge of base 25mm and axis height 60mm, has one of its corners in the HP. The axis is inclined at  $30^0$  to the HP. Draw the projections of solid.
2. The cone having base diameter 70mm and axis length 65mm is resting in VP on one of its circumference point. Draw the projections when the solid is resting on VP on one of its generators.

### **Sheet No. 4 (Section of Solids and development)**

**CO 4:** Draw sectional views and lateral development of regular solids

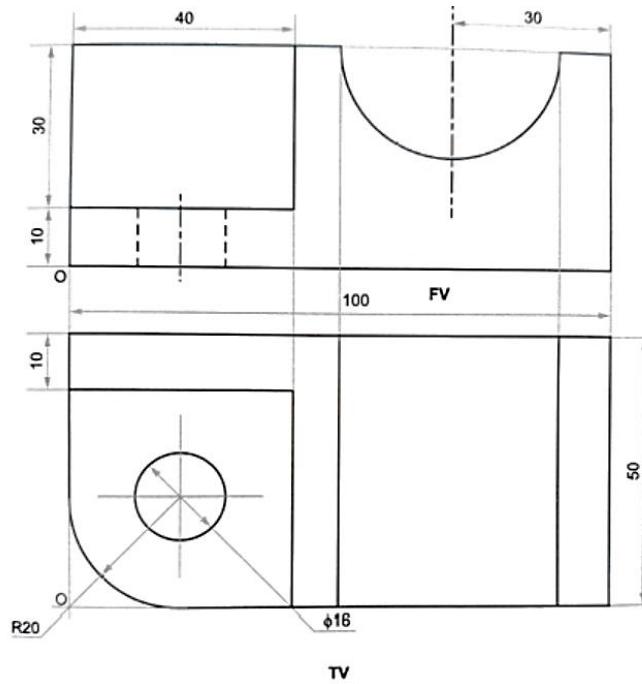
1. A cylinder of 60 mm diameter and 80 mm long stands with its circular base on HP. A section plane perpendicular to VP inclined at  $60^0$  to HP cuts the axis at a point 20 mm from top end. Draw the FV, sectional TV and also draw the development of the retained part.

2. A hexagonal pyramid of base 25mm and axis 65mm rests on the HP with two sides of base parallel to the VP. It is cut by a plane perpendicular to the VP and inclined at  $45^\circ$  to the HP intersecting the axis at 22mm above the base. Draw the FV, sectional plan and also draw the development of the lateral surface.

**Sheet No. 5 (Isometric Drawing)**

**CO 5:** Visualize and draw isometric drawing.

1. Figure shows the front view, Top view of an object. Draw its isometric drawing about an origin ‘O’.



2. Figure shows the Front view and side view of an object. Draw its isometric view about an origin ‘O’.

