Q1:* Draw the projection of a regular hexagon of 25mm sides, having one of its side in the H.P. and inclined at 60° to the V.P. and its Suface making an angle of 45° with the H.P.

2.5 Marks

- Projection of Planes

Q2:→ A Square pyramid, 40mm base sides and axis 60mm long, has a triangular face on the ground and the Vertical plane Containing the axis makes an angle of 45° with the V.P. Draw its projection. Take apex nearer to V.P.

15 Marks

- Projection of Solids

Q3:- Line AB is 75 mm long and it is 30° ∓ 40° inclined to HP ∓ VP respectively. End A is 12 mm above H.P and 10 mm in front of V.P. Draw it's projection ∓ Line is in 1st quadrant.

15 Marks.

– Projection of lines

Q.1- Line AB is 75mm long and it is 30 °& 40 °inclined to HP & VP respectively. End A is 12mm above HP and 10mm in front of VP. Draw projections. And find angle of TV & FV with XY line.

- Projection of Lines

Q.2 -Draw the projections of a regular hexagon of 25mm sides, having one of its sides in the H.P. and inclined at 600 to the V.P. and its surface making an angle of 450 with the H.P.

- Projection of planes

Q.3 - A cylinder 40 mm diameter and 50 mm axis is resting on one point of a base circle on VP while its axis makes 450 with VP and FV of the axis 350 with HP. Draw projections.

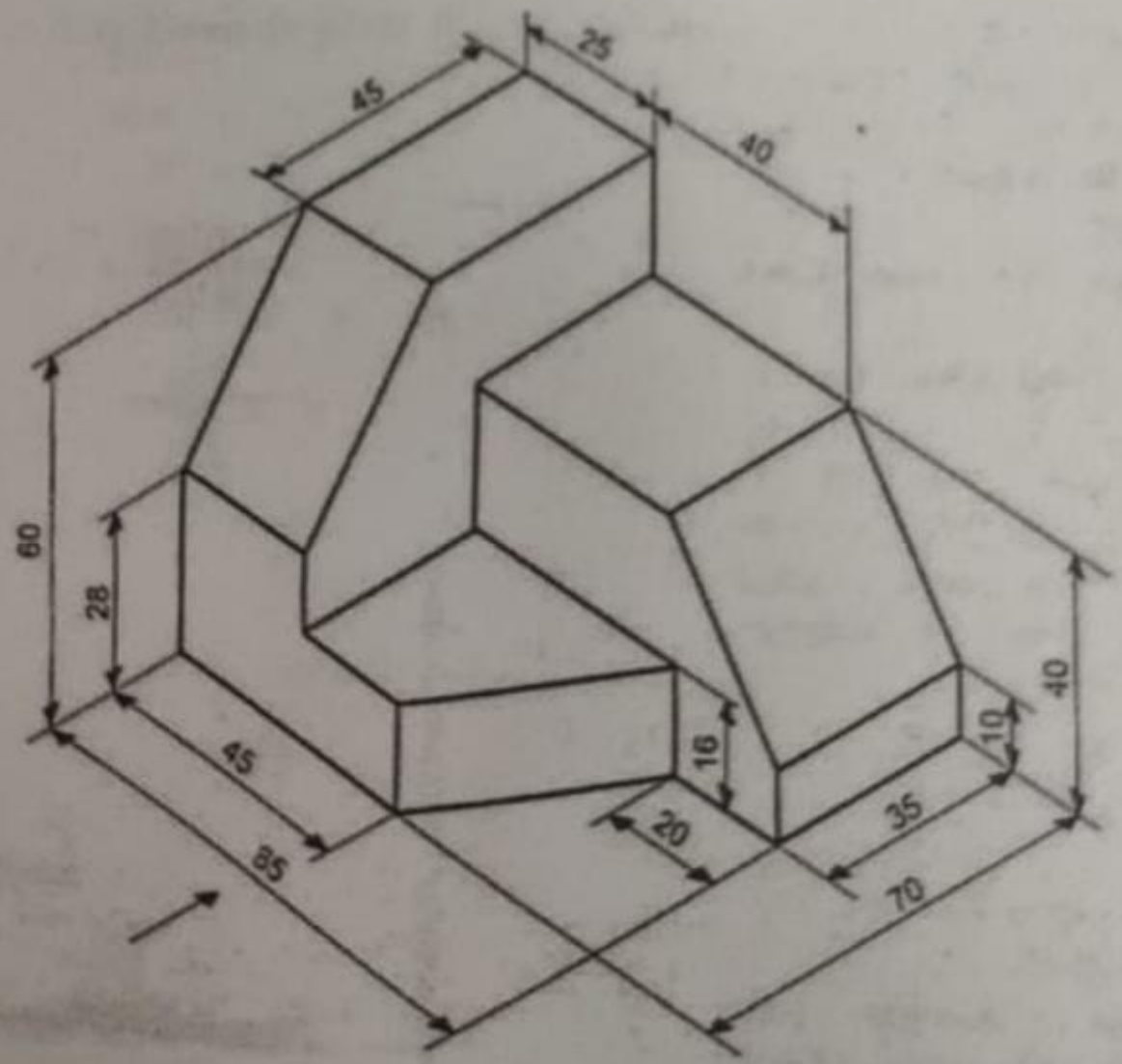
- projection of Solids

Q.4 - The distance between two stations is 100 km and on a road map, it is shown by 30 cm. Draw a diagonal scale and indicate distances of 46.8 km, 71.9 km, and 32.4 km on it.

- Diagonal Scale..

Orthographic projections

Q.5 – Draw the FV & TV of the following diagram given below: -



Q.1 – Draw the FV and TV of the fig. -1 taking marked arrow as front of the given diagram.

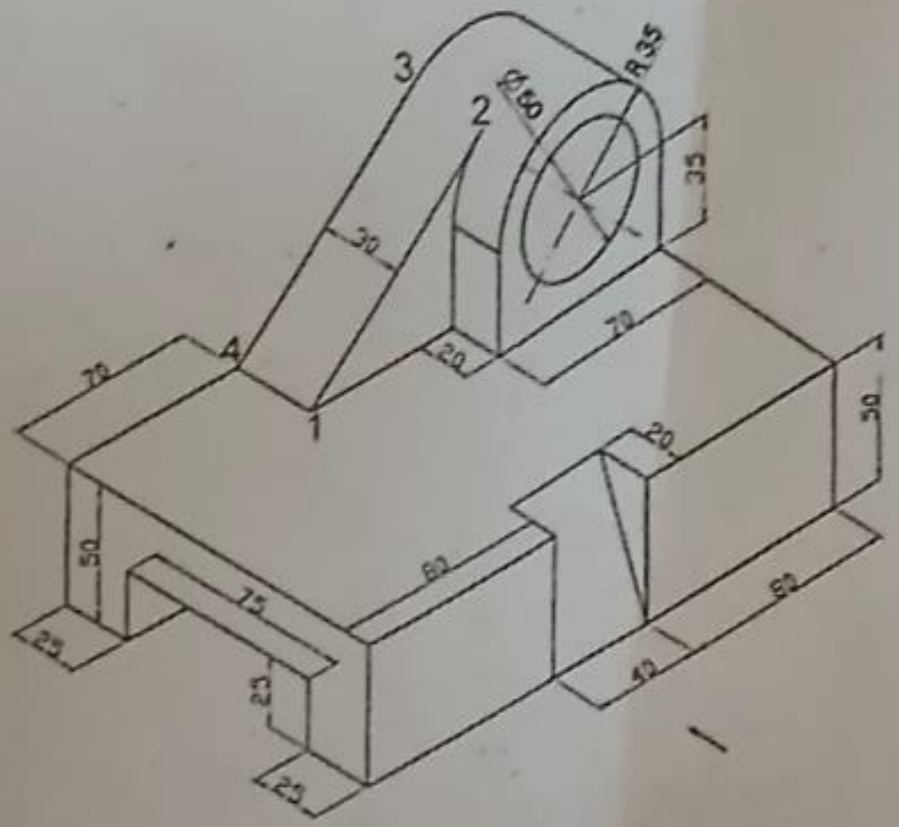


Fig. -1 {*All dimensions are in mm.}

orthographic projections

Q.2 - A regular pentagon of 30 mm sides is resting on HP on one of its sides with its surface 45° inclined to HP. Draw its projections when the side in HP makes 30° angle with VP.

- Projection of planes

Q.3 – Line AB is 75 mm long makes 45° inclination with VP while its FV makes 55°. End A is 10 mm above HP and 15mm in front of VP. Draw its projections and find its inclination with HP.

- projection of lines

Q.4 – The distance between Delhi and Agra is 200km. In a railway map it is represented by a line 5 cm long.

a) Find its RF.

b) Draw a diagonal scale to show a single km and maximum 600km.

c) Indicate on the scale drawn following distances 336km & 459km.

- Basics (1st lecture)

& 459km.

Q.5 – Draw the isometric projection of a cylinder having diameter 50mm and height 100mm.

– Isometric projection

Q 1. Line AB 75 mm long makes 45-degree inclination with VP while it's FV makes angle of 55. End A is 10 mm above HP and 15 mm in front of VP. If the line is in 1st Quadrant. Draw its projections and find its inclination with HP? (10 marks)

- Projection of lines.

Q 2. Draw the projections of a circle of 5cm diameter having its plane vertical and inclined at 30 degree to the VP. Its centre is 3cm above the HP and 2cm in front of the VP? (10 marks)

- Projection of Planes

Q 3. Draw the projections of a pentagonal prism, base 25 mm side and axis 50 mm long, resting on one of its rectangular faces on HP with the axis inclined at 45 degrees to the VP? (10 marks)

- Projection of solids

Q 4 A right circular cone, 40 mm base diameter and 60 mm long axis is resting on HP on one point of base circle such that it's axis makes 45 degree inclination with HP and 40 degrees inclination with VP. Draw its Projections? (10 marks)

– Projection of Solids.