1) A square prism 35 mm sides of base and 65 mm axis length rests on HP on one of its edges of the base which is inclined to VP at 30 deg. Draw the projections of the prism when the axis is inclined to HP at 45 deg.

## Solution : Points to be noted

1) Square Prism - 35 mm Side of Base
2) 65 mm Height
3) Axis Inclined to HP @ 45 Deg (Start in HP)
4) Edge of base Inclined to VP @ 30 Deg
5) Rests on HP on one of its edges of the base - Edge on Position

Step 1 - Keep the Prism on the ground, with its Axis parallel to VP and Draw the Front and top View of Prism


Step 2 - Incline the Axis of the Prism $\left(\mathrm{OO}_{1}\right)$ to HP at 45 Deg


Step 3 - Now incline the Edge of the base (QR) 30 Deg to VP and complete the Projections

## Solution:


2) A pentagonal prism 25 mm sides of base and 60 mm axis length rests on HP on one of its edges of the base which is inclined to VP at 30 deg. Draw the projections of the prism when the axis is inclined to HP at 30 deg .

Solution : Points to be noted - This Problem is similar to the First Problem. Only difference here is that it is a Pentagonal Prism

1) Pentagonal Prism - 25 mm Side of Base
2) 60 mm Height
3) Axis Inclined to HP @ 30 Deg (Start in HP)
4) Edge of base Inclined to VP @ 30 Deg

3. A hexagonal prism 25 mm sides of base and 50 mm axis length rests on HP on one of its edges. Draw the projections of the prism when the axis is inclined to HP at 45 deg. and appears to be inclined to VP at 40 deg.

Solution : Points to be noted

1) Hexagonal Prism - 25 mm Side of Base
2) 50 mm Height
3) Axis Inclined to HP @ 45 Deg (Start in HP)
4) Rest on HP on one of its EDGES - Start with EDGE on Position 5) Axis appears to be inclined to VP @ $\mathbf{4 0}$ Deg - Not a Beta Angle Problem

Step 1 - Keep the Prism on the ground, with one of its Edge of the Base (CD) parallel to HP and its Axis parallel to VP and Draw the Front and top View of Prism


Step 2 - Incline the Axis $\left(\mathrm{OO}_{1}\right) 45$ Deg to HP and complete the Projections


Step 3 - Incline the Axis $\left(\mathrm{OO}_{1}\right) 40$ Deg to VP and complete the Projections


