

*P**R**O**J**E**C**T**I**O**N**O**F**S**O**L**I**D**S**-**I*

Q1. Draw projection of following solids resting on their Base on HP.

- a) A cylinder having base diameter 40mm and height 60 mm.
- b) A pentagonal pyramid having base edge 25 mm and height 55 mm is resting on base on HP in such a way that one of its base edges is parallel to VP.
- c) Hexagonal prism, having base edge 30 mm and height 50 mm is resting on its base on HP, such that one of its base edges is perpendicular to VP.

Q2. A square Prism, base 40 mm side, axis 70 mm long is resting on its base on HP. One of the base edges is inclined at 60° to VP. Draw its projections.

Q3. A pentagonal pyramid side of base 25 mm and axis 50 mm long has one of its triangular faces on HP with its axis perpendicular to VP. Draw all three views.

Q4. An equilateral triangular prism, side of base 25 mm and axis 50 mm long is resting with one of its rectangular faces on HP with its axis Parallel to both Reference planes. Draw its projections.

Q5. A pentagonal prism, side of base 25 mm and axis 50 mm, is resting on one of its base edges on HP with its axis inclined at 45° to HP. Draw its projection by following methods.

- a. Change of position method
- b. Alteration X Y plane method (Auxiliary Plane Method)

Q6. A hexagonal pyramid of base side 30 mm, height 70mm is having one of its triangular surfaces inclined at 65° to HP. Draw projection of solid.

Q7. Draw projections of cube 25mm when it is resting on one of its corner of base in such a way that the base makes an angle of 45° with HP and vertical edges of cube remain parallel to VP.

Q8. A pentagonal pyramid, side of base 25 mm and height 45 mm is resting on one of its triangular faces on HP with its axis parallel to VP. Draw its projections.

Q9. A right circular cone 30 mm dia. Of base and axis 50mm long is resting on a point of base circle on HP with its axis inclined at an angle of 45° to HP and parallel to VP. Draw its projections

Q10. Draw the projection of cylinder having base diameter 30mm and height 55 mm is resting on one of its generators (element) on HP with its axis parallel to VP.

*P**ROJECTION OF**S**OLIDS-II*

Q1. A square prism, edge of base 25mm and axis 45mm long has its axis inclined at 45° to HP and an edges of the base on which the prism rests is inclined at 30° to VP. Draw its projections with

- a. Change of position Method
- b. Alteration XY method

Q2. A pentagonal pyramid, edge of base 25mm and axis 55mm long is resting on a corner of its base on HP in such a way that the slant edge contained by that corner makes an angle of 60° to HP and 30° to VP. Draw its projections.

Q3. A cone, base dia. 50mm and axis length 65mm is kept on the HP on a point of its base circle in such a way that its axis makes an angle of 30° with HP. Draw projections of cone when plan of its axis make 45° to XY line.

Q4. Draw the projections of cylinder 40mm diameter and 60mm height of the axis, resting in HP on a plane on its base circle. Its axis is inclined at 45° to HP and top view of its axis makes an angle of 60° with VP.

Q5. A hexagonal pyramid, base of side 25mm and axis 70 mm long, is resting on HP on one of its triangular faces. The side of the base contained by that face is inclined at 45° to VP. Draw its projections when the vertex is nearer to VP.