Rajiv Gandhi Institute of Petroleum Technology
Jais, Amethi

An Institution of National Importance, Government of India

Engineering Graphics (ME121)

Orthographic projections of solid

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Topics

1. Projection of Solid
2. Exercise

Solid Projection

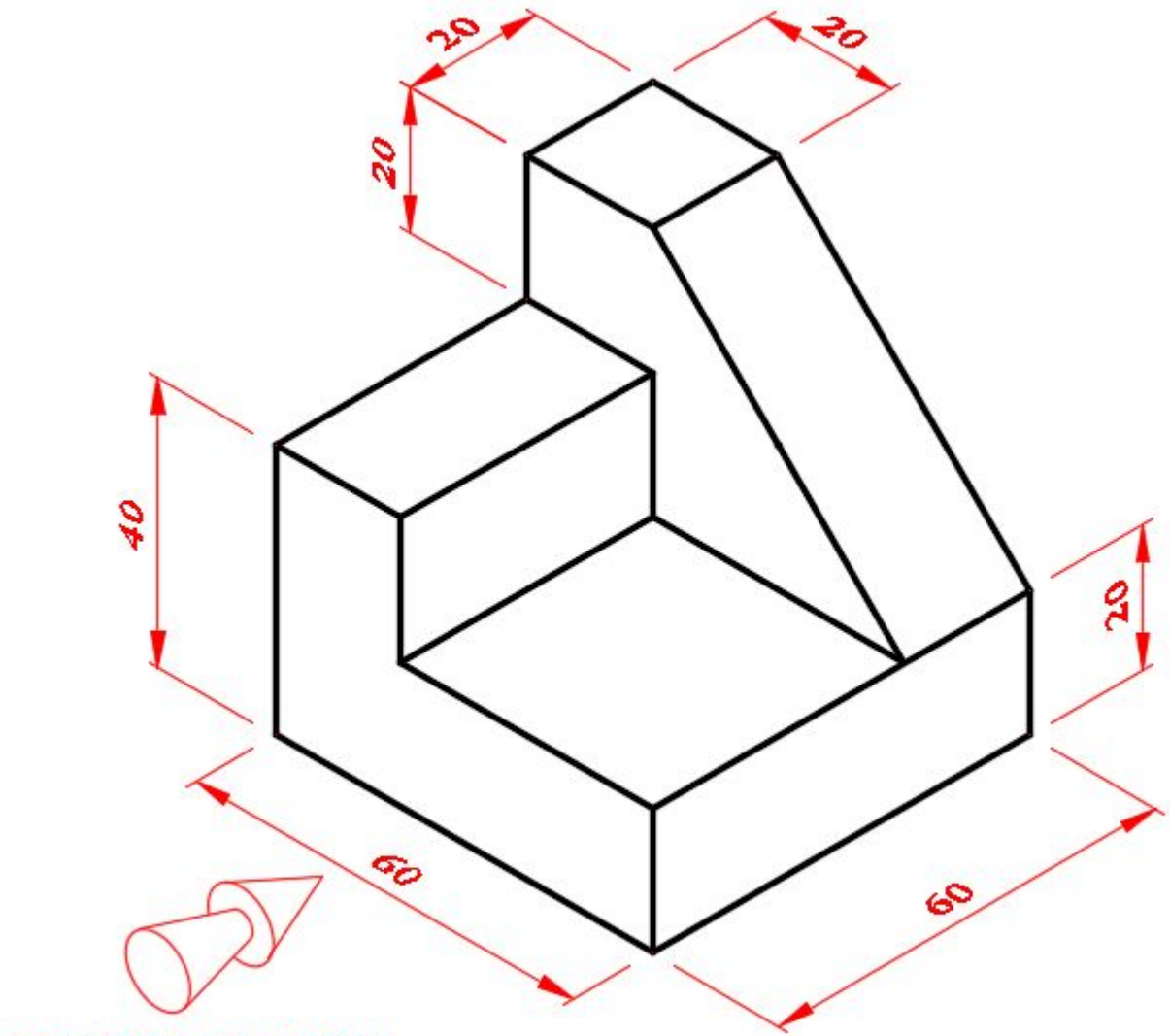
- **Prism**: having two equal and similar faces parallel to each other called its base and other faces are parallelogram.
- **Pyramid**: having one base and faces are triangular shapes
- **Solid of revolution**: Cylinder, cone sphere

- Positions of Solid in quadrants on the basis of their axis

a) Axis perpendicular to one of plain
b) Axis parallel to both plain
c) Axis incline to one plain and parallel to other
d) Axis inclined to both the plains

Exercise

1. A square pyramid base 40 mm side and 65 mm long has its base in the VP. One edge of base is inclined at 30° to the HP and a corner contained by that edge on the HP. Draw its projection.
2. A hexagonal prism has one of its rectangular face parallel to the HP. Its axis is perpendicular to the VP and 3.5 cm above the ground. Draw its projection when the nearer end is 2 cm in front of the VP. Side of base 2.5 cm long and axis 5 cm long.
3. A pentagonal prism has one of its rectangular face parallel to the VP Its axis is perpendicular to the HP Its Side of base 3.5 cm long and axis 7 cm long.



FRONT ELEVATION