## **Engineering Drawing Question Bank**

Unit ! Projection of lines

- 1. Draw the projections of the point
- A, 35 mm above HP and 25 mm in front of VP
- B, 40 mm below HP and 15 mm behind VP
- C, 50 mm above HP and 25 mm behind VP
- D, 45 mm below HP and 25 mm behind VP
- E, 30 mm behind VP and on HP
- A line PQ 40 mm long is parallel to VP and inclined at an angle of 30° to HP. The lower end P is
  15 mm above HP and 20 mm in front of VP. Draw the projections of the line.
- 3. A line CD measuring 80 mm is inclined at an angle of 30° to HP and 45° to VP. The point C is 20 mm above HP and 30 mm in front of VP. Draw the projections of the straight line.
- 4. Draw the projections of a regular pentagonal prism side of base 30 mm and axis 55 mm resting with its base on HP such that one of its rectangular faces is perpendicular to VP

Unit 2 -- Solids

- Draw the projections of a Hexagonal Prism, base side25mm and axis 60mm long when it is lying on HP on one of its base Corner, such that the axis is parallel to VP and inclined at 30° to HP.
- A cylinder of diameter 40mm and axis length 60mm is resting on the HP on a point so that its axis inclined at 30° to the HP and parallel to the VP. Draw its top and front views.
- A Pentagonal pyramid, side of base 30 mm and axis 60 mm long rests with one of its base edge on HP such that its base makes an angle of 60° to HP and its axis parallel to VP. Draw its projections.

- Cone of diameter 30 mm, axis height 60mm is lying on HP on one of its base Point with its axis inclined 30° to HP and Parallel to VP. Draw the Projection.
- Draw the projections of a pentagonal pyramid, base side25mm and axis 60mm long when it is lying on HP on one of its base edges, such that the axis is parallel to VP and inclined at 30° to HP.
- A cylinder of diameter 30mm and axis length 50mm is resting on the HP on a point so that its axis inclined at 45° to the HP and parallel to the VP. Draw its top and front views
- A hexagonal prism, side of base 25 mm and axis 50 mm long rests with one of its base corners on HP such that its base makes an angle of 60° to HP and its axis parallel to VP. Draw its projections.
- Cone of diameter 50 mm, axis height 70mm is lying on HP on one of its base Point with its axis inclined 40° to HP and Parallel to VP. Draw the Projection.

## Unit 3 - Section of solids

- A pentagonal pyramid of base side 25 mm and altitude 50 mm rests on its base on HP with one of the base edges perpendicular to the VP. It is cut by a plane inclined at 45° to the base. The cutting plane meets the axis at 20 mm above the base. Draw the front view, sectional top view and true shape of the section.
- A Hexagonal Prism, edge of base 20mm and Axis 50mm long rest with its base on HP such that one of its rectangular faces is parallel to VP. It is cut by a Plane Inclined at 45° to HP and passing through the Right top Corner of the prism (i) Draw the Sectional Top view.
- A hexagonal prism of base side 25 mm and height 50 mm rests on the HP on one of its ends with two rectangular faces parallel to the VP. It is cut by a plane perpendicular to the HP and inclined at 50° to the VP at a distance of 10 mm away from the axis. Draw the top view, sectional front view and true shape of the section.

## Development of surface

Draw the development of a lampshade which is in the form of a frustum of a cone of base diameter 80mm and the top diameter 40mm, the height of the frustum being 40mm

## Unit 4 and 5

- (a) Sketch by free hand, the following views of the objects shown in Figure. The dimensioning is also to be marked by free hand.
  - (i)The front view in the direction of the arrow
  - (ii)The top view
  - (iii)The Side view, as viewed from the side available for view



Sketch by free hand, the following views of the objects shown in Figure. The dimensioning is also to be marked by free hand.

(i)The front view in the direction of the arrow

(ii)The top view

(iii)Side view



Sketch by free hand, the following views of the objects shown in Figure. The dimensioning is also to be marked by free hand.

(i)The front view in the direction of the arrow

(ii)The top view

(iii)The Side view, as viewed from the side available for view



Sketch by free hand, the following views of the objects shown in Figure. The dimensioning is also to be marked by free hand.

- (i)The front view in the direction of the arrow
- (ii)The top view
- (iii)Side view



A hexagonal prism, side of base 23mm and height 60mm rests on HP and one of the edges of its base is parallel to VP. A section plane perpendicular to VP and inclined at 50° to HP bisects the axis of the prism. Draw the isometric view of the truncated prism, showing the cut surface.

A pentagonal Pyramid 30 mm edge of base and 65 mm height stands on HP such that an edge of the base is parallel to VP and nearer to it. A section plane perpendicular to VP and inclined at 30° to HP cuts the pyramid passing through a point on the axis at a height of 35 mm from the base. Draw the isometric projection of the truncated pyramid showing the cut surface.

A cylinder of 60 mm diameter and 70 mm height, stands on HP. A Section plane perpendicular to VP and inclined at an angle of 45° to HP bisects the axis. Draw the isometric projection of the truncated cylinder, showing the cut surface.

A cone, base 50 mm diameter and axis 70mm long stands on HP. It is cut by a section plane perpendicular to VP, inclined at 45° to HP and passing through a point on the axis 35mm above the base. Draw the isometric projection of the truncated cone, showing the cut surface.

Draw the front and top views of a Panchayat office, the line drawing of which is shown in fig. Make Suitable Assumption Wherever is needed



The line drawing of a Single room office building is shown in fig. Draw the front, Top Views to a Suitable scale .Assume Suitable data if necessary



Draw the front and top views of a Panchayat office (Fig 1), the line drawing of which is shown in fig. Make Suitable Assumption Wherever is needed.