UNIT – III

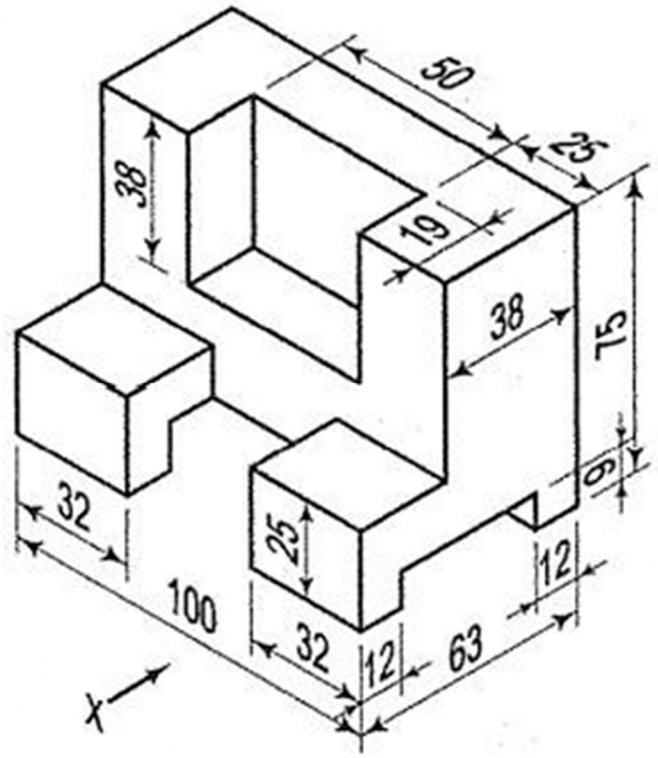
1. A hexagonal pyramid of base side 30 mm and axis 60 mm, has an edge of its base on the ground inclined at 45° to the V.P. and the axis is inclined at 30° to the H.P. Draw its projections.
2. A hexagonal pyramid of base side 30 mm and axis 50 mm, rests on one of its base corners on the ground with axis inclined at 45° to the H.P. Draw its projections when a vertical plane containing the axis and the corner that lies in the H.P. is inclined at 30° to the V.P.
3. A cylinder of base diameter 50 mm and axis 65 mm rests on a point of its base circle on the H.P. Draw its projections when the axis is inclined at 30° to the H.P. and top view of the axis is perpendicular to the V.P
4. A hexagonal prism of base edge 30 mm and axis 70 mm has an edge of its base in the V.P. and inclined at 60° to the H.P. Draw its projections, when the edge of the other base farthest away from V.P. is at a distance of 85 mm from the V.P.
5. A square prism of base edge 35 mm and axis 60 mm is resting on an edge of its base on the H.P. and the axis inclined at 45° to the H.P. If the edge resting on the H.P. is inclined at 30° to the V.P., draw its projections.
6. A pentagonal prism of base side 30 mm and axis 60 mm has an edge of its base in the V.P. and inclined at 45° to the H.P. Its axis is inclined at 30° to the V.P. Draw its projections.
7. A square pyramid of base side 40 mm and axis 60 mm is resting on its base on the H.P. with a side of base parallel to the V.P. Draw its sectional views and true shape of the section, if it is cut by a section plane perpendicular to the V.P., bisecting the axis and is (a) parallel to the H.P., (b) inclined at 45° to the H.P.
8. A square pyramid of base side 40 mm and axis 60 mm is resting on its base on the H.P. with all the sides of the base equally inclined to the V.P. Draw its sectional views and true shape of the section, if it is cut by a section plane perpendicular to the V.P., bisecting the axis and is (a) parallel to the H.P., (b) inclined at 45° to the H.P
9. A pentagonal pyramid of base side 30 mm and axis 60 mm is resting on its base on the H.P. with an edge of the base parallel to the V.P. It is cut by a section plane perpendicular to the V.P., inclined at 60° to the H.P. and bisecting the axis. Draw its front view and sectional top view and true shape of the section.
10. A pentagonal pyramid of base side 30 mm and axis 60 mm is resting on its base in the H.P. with an edge of the base parallel to the V.P. A horizontal section plane cuts the pyramid bisecting the axis. Draw its front view and sectional top view.
11. A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. It is cut by an A.I.P. inclined at 45° to the H.P. and passing through a point on the axis, 20 mm above the base. Draw its sectional top view and obtain true shape of the section.
12. A cylinder of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. It is cut by a section plane perpendicular to V.P., the V.T. of which cuts the axis at a point 40 mm from the bottom face and inclined at 45° to the reference line. Draw its front view, sectional top view and true shape of the section.

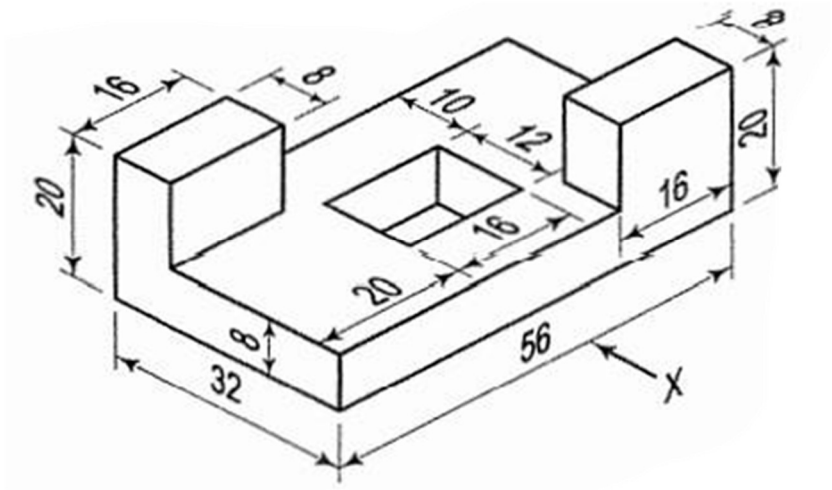
UNIT – IV

1. A pentagonal prism of base side 30 mm and axis 70 mm is resting on its base on the H.P. with a rectangular face parallel to the V.P. It is cut by an auxiliary inclined plane (A.I.P.) whose V.T. is inclined at 45° to the reference line and passes through the mid-point of the axis. Draw the develop ment of the lateral surface of the truncated prism.
2. A cylinder of base diameter 50 mm and axis 70 mm is resting on ground with its axis vertical. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P., passing through the top of a generator and cuts all the other generators. Draw the development of its lateral surface.
3. A hexagonal prism of base side 30 mm and height 70 mm, is resting on its base on the H.P. with a side of the base perpendicular to the V.P. The prism has a cylindrical hole of diameter 40 mm, drilled centrally such that the axis of hole is perpendicular to the V.P. Draw the development of the lateral surface of the prism.
4. A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. A section plane perpendicular to V.P. and inclined at 45° to H.P., bisects the axis of the cone. Draw the development of its lateral surface.
5. A hexagonal prism of base side 30 mm and height 80 mm, is resting on its base on the H.P. with a side of the base perpendicular to the V.P. The prism has a cylindrical hole of diameter 40 mm, drilled centrally such that the axis of hole is perpendicular to the V.P. Draw the development of the lateral surface of the prism.
6. A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. Draw the development of its lateral surface when it is cut by an auxiliary inclined plane inclined at 60° to the H.P. and bisecting the axis.
7. A square pyramid of base side 40 mm and axis 60 mm is resting on its base on the H.P. such that all the sides of the base are equally inclined to the V.P. It is cut by a section plane perpendicular to the V.P. and inclined at 60° to the H.P., bisecting the axis. Draw the development of its lateral surface.
8. A cylinder of base diameter 50 mm and axis 80 mm is resting on ground with its axis vertical. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P., passing through the top of a generator and cuts all the other generators. Draw the development of its lateral surface.
9. A square pyramid of base side 40 mm and axis 60 mm is resting on its base on the H.P. such that a side of the base is parallel to the V.P. It is cut by a section plane per pendicular to the V.P. and inclined at 45° to the H.P., bisecting the axis. Draw the development of its lateral surface.
10. A hexagonal prism of base side 30 mm and axis 70 mm is resting on its base on the ground with a side of base inclined at 45° to the V.P. It is cut by an auxiliary inclined plane inclined at 45° to the H.P. and passes through a point 15 mm below the top end of the axis. Draw the development of the lateral surface of the truncated prism.
11. A cone of base diameter 50 mm and axis 60 mm is resting on its base on the H.P. A section plane perpendicular to V.P. and inclined at 45° to H.P., bisects the axis of the cone. Draw the development of its lateral surface.
12. A cylinder of base diameter 50 mm and axis 80 mm is resting on ground with its axis vertical. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P., passing through the top of a generator and cuts all the other generators. Draw the development of its lateral surface.

UNIT – V

1. Draw the isometric view of a cylinder of base diameter 40 mm and axis 60 mm. The axis of the cylinder is perpendicular to the
2. Draw the isometric projection of a cone of base diameter 50 mm and axis 70 mm. The cone has its base on the (a) H.P. (b) V.P.
3. Draw an isometric projection of a pentagonal prism of base side 35 mm and axis 60 mm. The prism rests on its base on the H.P. with an edge of the base parallel to the V.P.
4. Draw the isometric projection of a cone of base diameter 50 mm and axis 60 mm. The cone has its base on the (a) H.P. (b) V.P
5. Draw the isometric projection of the frustum of a hexagonal pyramid of base side 40 mm, top side 25 mm and height 70 mm. The frustum rests on the base on the H.P
6. Draw the isometric projection of the frus tum of a cone of base diameter 60 mm, top diameter 30 mm and height 55 mm.
7. Pictorial view of an object is shown in Fig. Using first angle projection, draw its (a) front view from the X-direction, (b) top view and (c) left-hand side view

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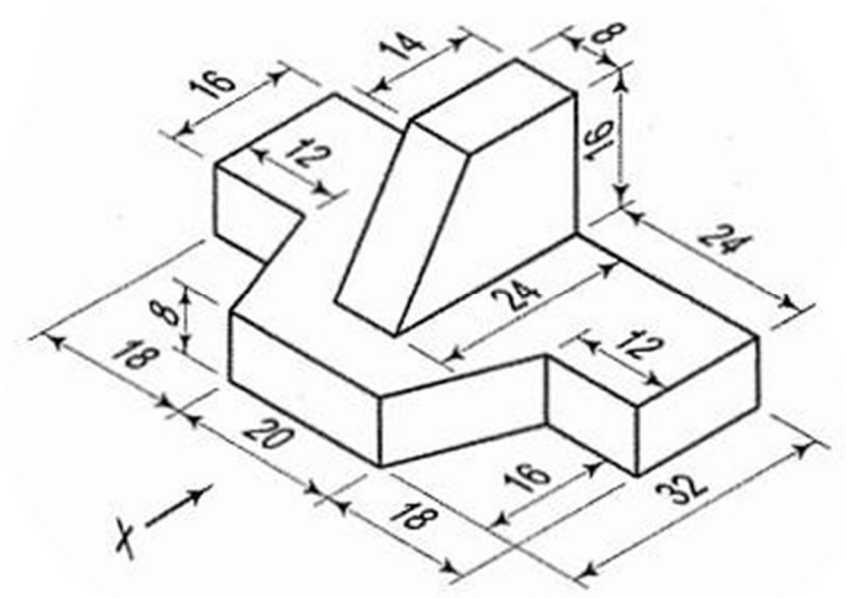
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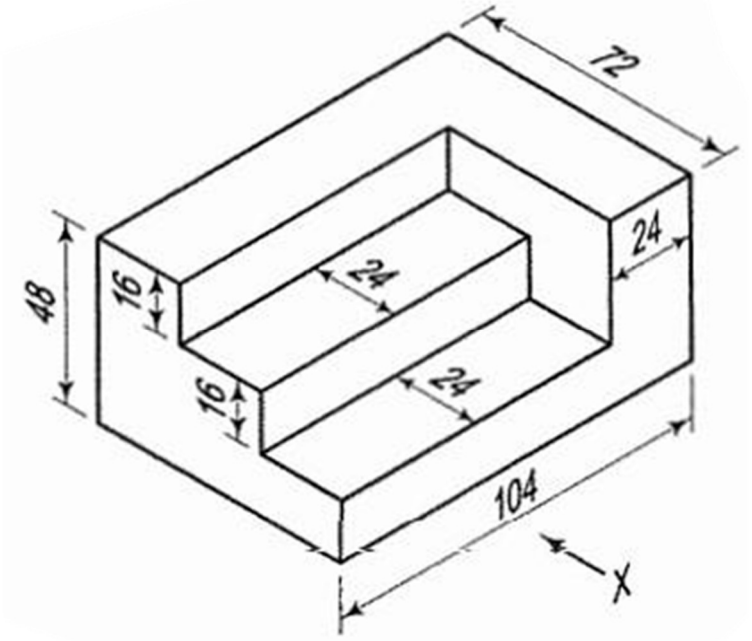
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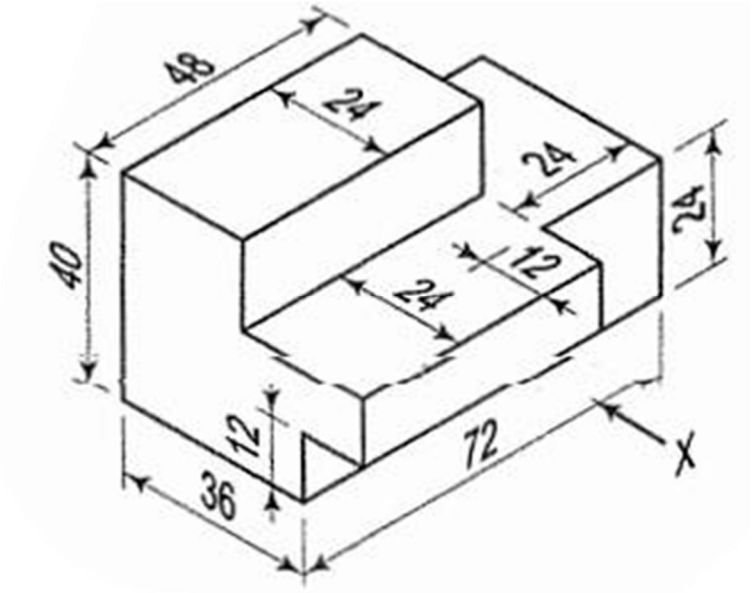
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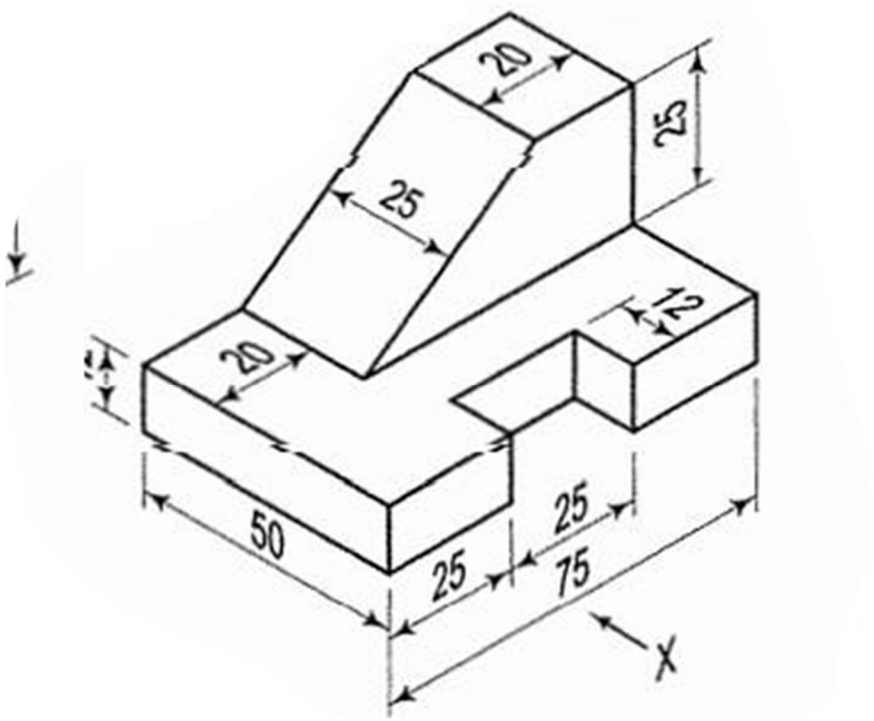
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