

Question Bank (I scheme)

Name of subject: EDR

Course :ME

Semester: II

Unit Test :I

Subject code: 22207

Chapter 1. PROJECTION OF STRAIGHT LINES AND PLANES (6M)

1. Line AB 90 mm long has its end A 20 mm above HP and 25 mm in front of VP. The line is inclined at 30° to HP and 45° to V.P. draw the projections.
2. A line AB, 60mm long has its end A 25mm above HP and 30mm in front of VP. It is inclined at 30° to the HP and 45° to the VP. Draw its front view and top view.
3. The top view of a 75 mm long line AB measures 65 mm, while the length of its front view is 50 mm. It's one end A is in the H.P. and 12 mm in front of V.P. Draw the projections of AB and determine its inclination with the H.P. & V.P.
4. Line AB 75mm long has its end point A 15mm above HP and 10mm in front of VP and end point B 45mm above HP and 50mm in front of VP. Determine true inclination of the line with HP and VP.
5. A circular plate of 45mm diameter has it one point on circumference resting on the H.P. it is inclined at 60° to the H.P. draw the three views and neglect the thickness of the plate.
6. A hexagonal plate of negligible thickness is resting on one side on the V.P. the plate is inclined at 45° to the VP. And perpendicular to the H.P. the side of plate is 30mm. Draw the three views.
7. A pentagonal plate 30 mm side rests on H.P. on one of its corners and is inclined at 40° to H.P. and perpendicular to V.P. Draw the projections.
8. A circular plate of 60 mm diameter is inclined to H.P. such that top view appears to be ellipse of minor axis 35 mm Draw the projection of plate and find its inclination to H.P. if it is perpendicular V.P.

Chapter 2. PROJECTION OF SOLIDS (PRISM) (7M)

1. A hexagonal prism side of base 25 mm and axis 50 mm long rests with one of its base corner on H.P. Such that base makes an angle of 60° to H.P. and axis parallel to V.P. Draw the projections
2. A pentagonal pyramid side of base 25 mm and axis 55 mm long, lies with one of its slant edges on H.P. axis parallel to V.P. Draw the projections.
3. Draw the projections of cone, base 30 mm diameter and axis 50 mm long resting on H.P. on a point of circumference of base circle. Axis inclined to H.P. at 45° and parallel to V.P.
4. A cylinder of base diameter 50mm and axis length 60mm is kept on VP. On a point of its base circle such that its axis is inclined to VP. At 30° and parallel to HP. Draw the projection of cylinder.

Chapter 3. SECTION OF SOLIDS (Prisms)

(7M)

1. A hexagonal prism side of base 30 mm and axis 60 mm long rests on H.P. with its base and one of rectangular faces perpendicular to V.P. It is cut by a plane inclined at 45° to H.P. and perpendicular to V.P. passing through a point on axis at distance of 20 mm from top face. Draw the following views.

(i) Sectional top views.

(ii) Front view

(iii) True shape of section

2. A square prism base 45mm and height 80mm stands vertically on the HP. With that edge of the base equally inclined to VP. A Cutting plane, perpendicular to VP. And inclined at 60° to HP cuts the axis at a point 15mm from its top end. Draw front view, sectional top view and true shape of the section.

3. A pentagonal pyramid side of base 35 mm axis 60 mm long rest with its base on H.P. Edge of base perpendicular to V.P. A section plane perpendicular to H.P. and parallel to V.P. cuts the pyramid at a distance of 20 mm from the corner of base nearer to observer. Draw

(i) Top view

(ii) Sectional front view

4. A hexagonal pyramid base 30mm and height 80mm stands vertically on the HP. With that edge of the base perpendicular to VP. A Cutting plane, perpendicular to VP. And inclined at 45° to HP cuts the axis at a point 15mm from its top end. Draw front view, sectional top view and true shape of the section.

5. A cone base 50 mm diameter and axis 65 mm long rests with its base on H.P. It is cut by section plane which is inclined to H.P. at 45° and perpendicular to V.P. and passing through a point on axis 35 mm above base, Draw

(i) Front view

(ii) Sectional top view

(iii) True shape of the section