

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Section.

x-x-x

1. (a) What are oblique planes?
- (b) What is the use of sectional view in drawing?
- (c) What is the importance of development of surfaces?
- (d) Show by traces the following planes: AIP and AVP.
- (e) What are skew lines?

(5x2)

Section A

2. (a) What are the benefits of using 'Layers' in drawing? 2.5
- (b) Discuss the utility of following AutoCAD commands: Chamfer, Break. 2.5
- (c) Point R of a line RS is 30 mm above HP and 15 mm in front of VP, while Point S is 40 mm below HP and 20 mm behind VP. The distance between the end projectors of the line is 45 mm. Draw the projection of the line and find its true length. 5
3. A rectangular lamina of size 30mm × 50mm rests on H.P. on its shorter edge such that the surface of the lamina is inclined to H.P. at an angle of 45° and the side on which it rests, inclined at 30° to V.P. Draw its projections in first quadrant. 10
4. Draw the projections of a pentagonal prism, base 25 mm side and axis 50 mm long, resting on one of its rectangular faces on the H.P. with the axis inclined at 45° to the V.P. 10

Section B

5. A square pyramid, side of base 40 mm and height 60 mm, is resting on HP on its base with sides of the base equally inclined to VP. Develop the lateral surface of the solid. 10
6. A hexagonal prism of side 20 mm and length 55 mm is centrally placed on a cylinder of diameter 50 mm and height 60 mm. Draw the isometric drawing of the solids. 10
7. What are the uses of auxiliary planes? Discuss the procedure to draw the true shape of a rounded surface on an auxiliary plane by taking a suitable example. 10

x-x-x