

Engineering Drawing

List of Experiments

◆ Geometrical Constructions

1. Study and use of drawing instruments
2. Drawing different types of lines and practicing dimensioning techniques
3. Bisecting a given straight line
4. Bisecting a given angle
5. Dividing a line into equal number of parts
6. Construction of regular polygons (Pentagon & Hexagon) using different methods

◆ Construction of Conics

7. Construction of ellipse by general method
8. Construction of ellipse by oblong method
9. Construction of ellipse by concentric circles method

◆ Simple Projections

10. Introduction to orthographic projections (First angle projection method)
11. Projections of a point situated in I, II, III & IV quadrants
12. Projections of straight lines:
 - Line parallel to one or both reference planes
 - Line contained by one or both planes
 - Line perpendicular to one plane
 - Line inclined to one plane and parallel to other
13. Projections of planes:
 - Plane parallel to one of the reference planes
 - Plane inclined to one reference plane
 - Determining traces of planes

◆ Projections of Solids

14. Projections of polyhedra in simple positions

- 15. Projections of solids with axis inclined to the V.P. and parallel to the H.P.
- 16. Projections of solids with axis inclined to the H.P. and parallel to the V.P.
- 17. Projections of solids of revolution in similar positions

◆ **Orthographic and Isometric Projections**

- 18. Conversion of pictorial (isometric) views into orthographic views
- 19. Study of isometric axes, lines, and planes
- 20. Use of isometric scale and drawing isometric projections of plane figures
- 21. Isometric drawings of prisms and pyramids
- 22. Conversion of orthographic views into isometric views