

## **Experiment 1: Creating Basic 2D Entities Using Coordinate Systems and Drawing Aids**

### **Objective:**

To draw basic 2D geometric entities (lines, circles, arcs, polygons, rectangles, etc.) using software coordinate input and drawing aids (like grids, snaps, ortho mode).

### **Software/Tools Required:**

- AutoCAD
- Laptop/PC

### **Theory:**

Provide theoretical background relevant to the task, including commands and standards.

### **Procedure:**

1. Open the CAD software.
2. Set up the drawing units and limits.
3. Use the line, circle, arc, and rectangle commands from the draw panel.
4. Enter coordinates directly or use object snaps and ortho mode for accuracy.
5. Save the file as “Basic\_2D\_Entities.dwg”.

### **Results:**

Attach a printout of the completed drawing here.

### **Conclusion:**

Summarize the skills learned and their applications in civil engineering.