### **BUILDING DRAWING (CAD) LAB**

## **Course Objectives:**

- 1. Plot the layout of building for a given details
- 2. Create multi-view drawings (orthographic projections).
- 3. Draw section views.
- 4. Create shapes and symbols for different uses.
- 5. Create and manage symbols libraries.

#### **Course Outcomes:**

- 1. Create, display, and plot working drawings.
- 2. Use layering techniques.
- 3. Construct technical drawings using a standard computer aided drafting program.
- 4. Identify, operate and adjust input and output devices.
- 5. Demonstrate file management techniques.

#### LIST OF EXERCISES

### I. Using CAD software draw & print the following drawings.

- 1. Draw conventional signs as per I.S. standards, symbols used in civil engineering drawing.
- 2. Prepare the King post & Queen post truss and lable the various parts.

# II. Residential buildings.

- 1. Plan, Elevation, Section of single roomed building
- 2. Single storied Two bed room residential building.

# III. Structural detailing drawings

- 1. Lintel cum Sunshade
- 2. Detailing of rectangular RCC beam
- 3. Continuous Beam.
- 4. Isolated Column with square footing

# IV. Drawings to be submitted for approval to corporation or municipality showing required details in one sheet such as

- 1. Plan Showing Dimensions of all rooms.
- 2. Section showing Specifications and Typical Foundation Details.
- 3. Elevation.
- 4. Site Plan Showing Boundaries of Site and Plinth Area
- 5. Key plan Showing the location of Building.
- 6. Title Block Showing signature of Owner & Licensed surveyor's.