

Experiment 10

Date: 17/10/25

Generate Detailed 2d Engineering Drawings Of Simple Parts From 3d Solid Models, Including Multiple Views, Dimensions, And Annotations

Aim:

To generate detailed 2D engineering drawings of simple parts from 3D solid models, including multiple views, dimensions, and annotations.

Software/Tool Required:

Fusion 360

Diagram:

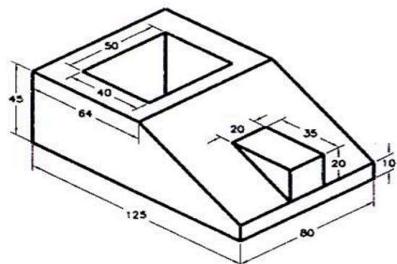
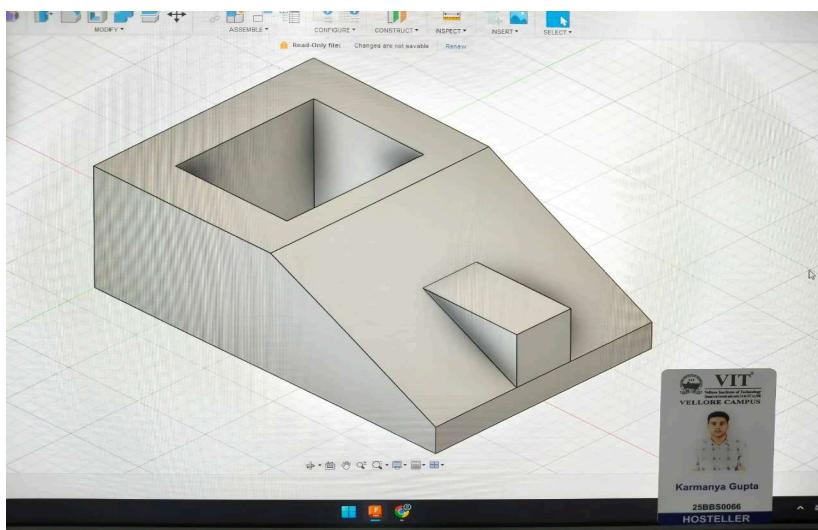


Figure 1

Photograph of simulation result done in lab along with its results:



Inference:

Orthographic projection techniques and software tools effectively translate complex three-dimensional shapes into clear, standardized two-dimensional views. These views, including front, top, and side, collectively represent the complete geometry and features of the part with precise and consistent dimensions and annotations. This process bridges the gap between digital 3D design and traditional manufacturing documentation, ensuring clear communication of technical specifications.

Result:

The experiment demonstrates the successful creation of detailed and accurate 2D engineering drawings derived from the 3D model. These drawings include multiple views, dimensioning, and annotations essential for manufacturing or inspection. They provide all necessary information such as sizes, shapes, tolerances, and notes, allowing engineers, machinists, and fabricators to accurately interpret and produce the part.