

EX.No.2.1 CREATE A 3D SOLID MODEL FROM ISOMETRIC DRAWING

Date:

AIM

To create a 3D model from the given isometric drawing using fusion 360 tool.

REQUIREMENTS

1. Autodesk fusion 360
2. Windows 10
3. 16 GB of RAM (integrated graphics recommend 1 GB or more)
4. 2.5 Mbps or faster download; 500 Kbps or faster upload

PROCEDURE

STEP-1: Start the sketch command

Select Sketch > Create Sketch.

STEP-2: Select the Sketch Plane

Select the Front (XZ) Plane

STEP-3: Create a Rectangle

1. Select Sketch > Rectangle > Center Rectangle.
2. Now hover over the origin (center) of the sketch. You should see the cursor snap to this location.
3. Click once to begin placing the rectangle.
4. Type the Tab button and enter the values 100 mm and 60mm for the width and height respectively.
5. Click again to place the rectangle.
6. Click Finish Sketch after completing.

STEP-4: Extrude Rectangle in XZ Plane

1. Select Extrude.
2. Select the Rectangle sketch.
3. Click again to place the value.
4. Type in the value of 30mm.
5. Press ENTER to accept the value.

STEP-5: Start the sketch command

Select Sketch > Create Sketch.

STEP-6: Select the Sketch Plane

Select the FRON SURFACE of rectangular block

STEP-7: Create a CIRCLE

1. Select Sketch > CIRCLE > CENTER CIRCLE.
2. Now hover over the origin (center) of the sketch. You should see the cursor snap to this location.
3. Click once to begin placing the CIRCLE.
4. Type the Tab button and enter the value DIA 100mm .
5. Click again to place the circle.

6. Click Finish Sketch after completing.

STEP-8: Extrude CIRCLE

1. Select Extrude.
2. Select the Rectangle sketch.
3. Click again to place the value.
4. Type in the value of 20mm.
5. Press ENTER to accept the value.

STEP-9: Start the sketch command

Select Sketch > Create Sketch.

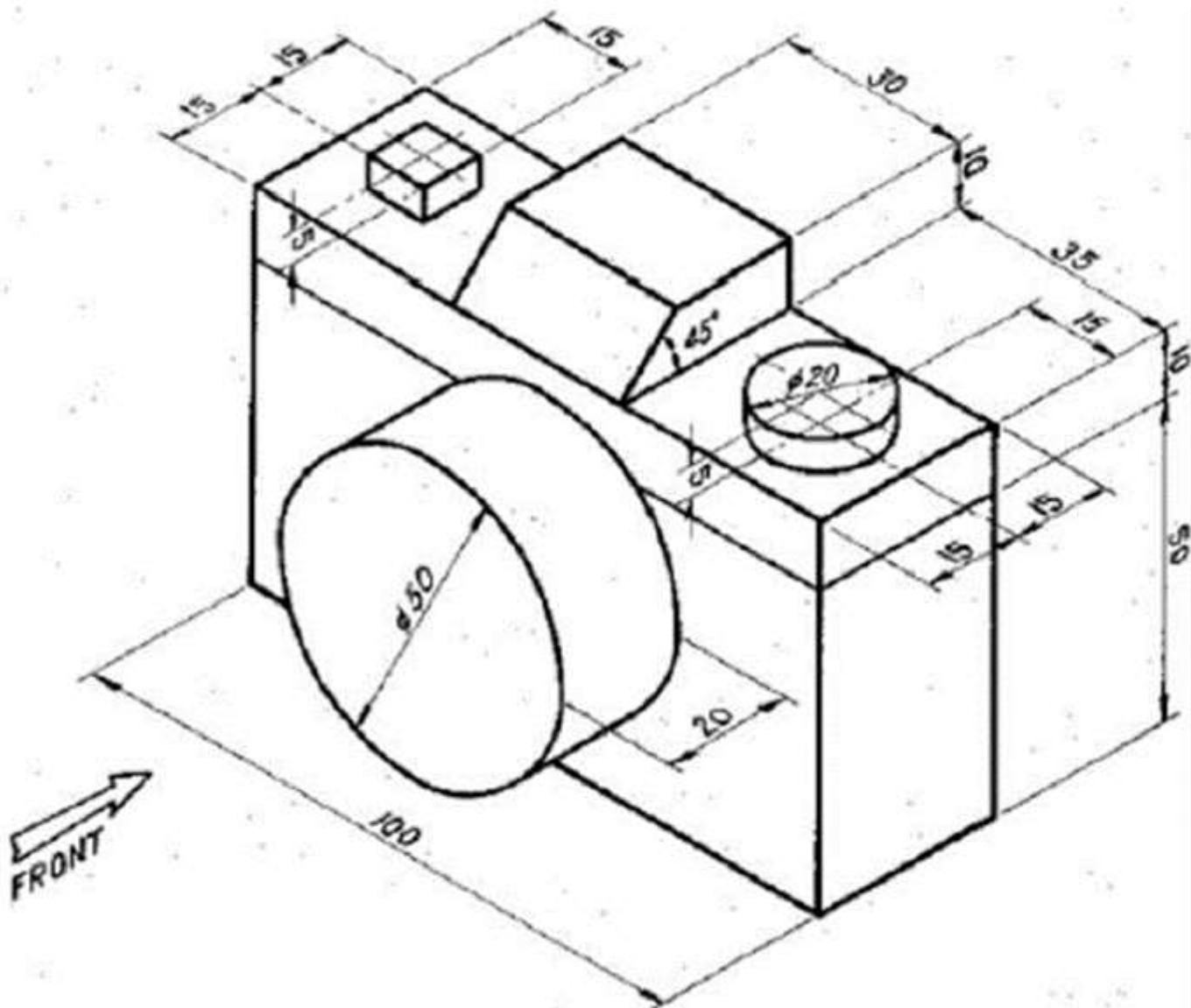
STEP-10: Select the Sketch Plane

Select the TOP SURFACE OF RECTANGLE.

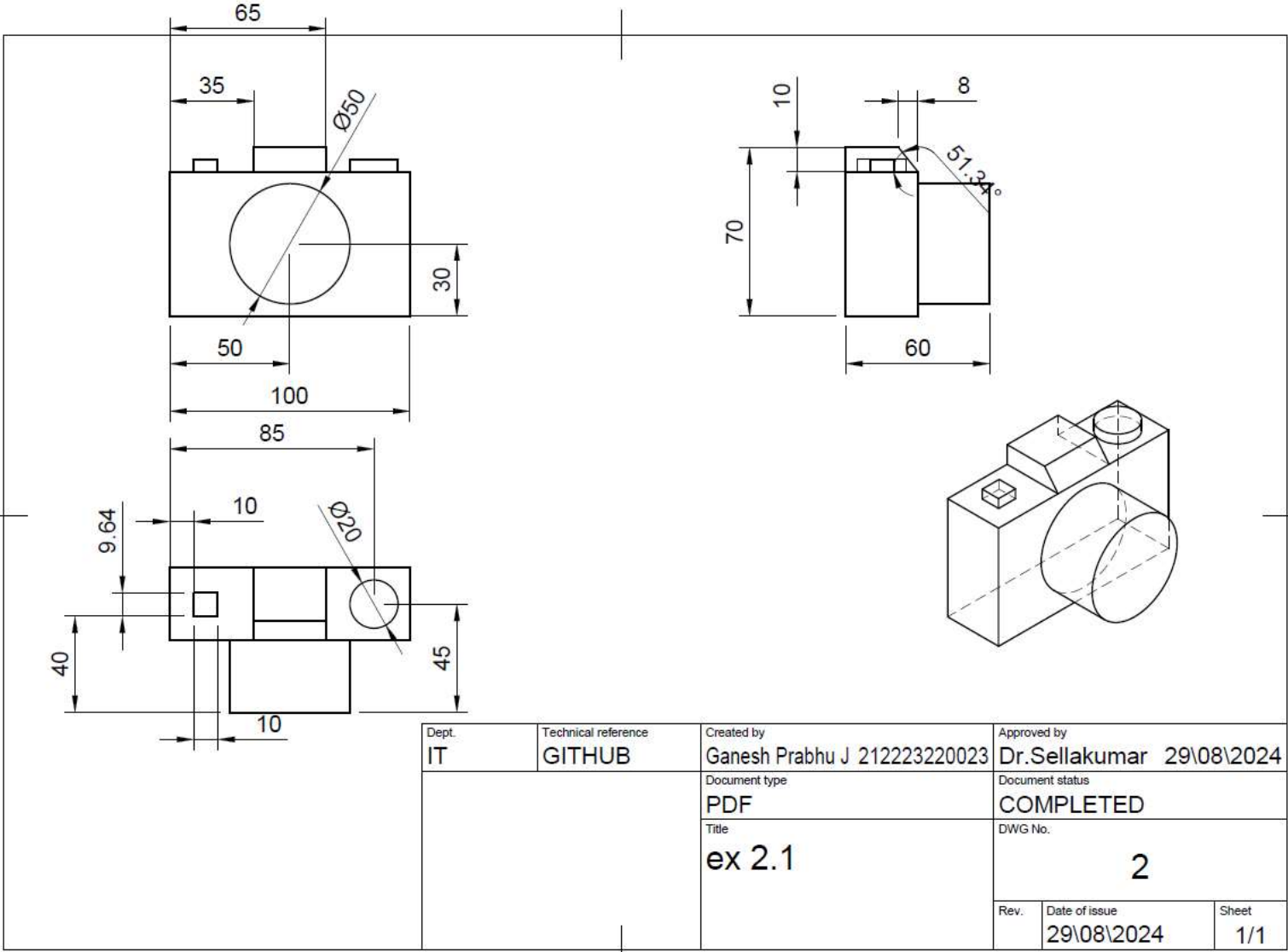
STEP-11: Create a line

1. Select Line command.
2. Draw the projections in the diagram
3. Click Finish Sketch.
4. extrude the sketch.

INPUT



OUTPUT



RESULT:

Thus, the 3D model is created from given isometric drawing.