

1. Exercise : 8

2. Date: 04/12/2020

3. Title : Building Drawing (2D/3D).

4. Aim : To draw the orthographic multi-view projection of a building with sectioned view showing the construction details.

5. Software used: Autodesk AutoCAD 2021.

6. Introduction: Building drawing, Plan, Elevation and Sectional view:

- **BUILDING DRAWING** = An architectural drawing or architect's drawing is a technical drawing of a building that falls within definition of architecture.
- **SECTIONAL VIEW** = It is section looks inside an object, Sections are used to clarify the interior construction.
- **PLAN** = It is typically any drawing with details of timing.

6.4 Terminology (with sketch):

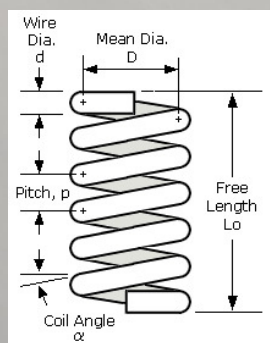


Fig.

6.2 Real time example Picture



Fig.

7. Procedure (for solving question #): To understand the different

7.1 Question outline

: combination of solids.

7.2 Object

: Various 2D and 3D objects.

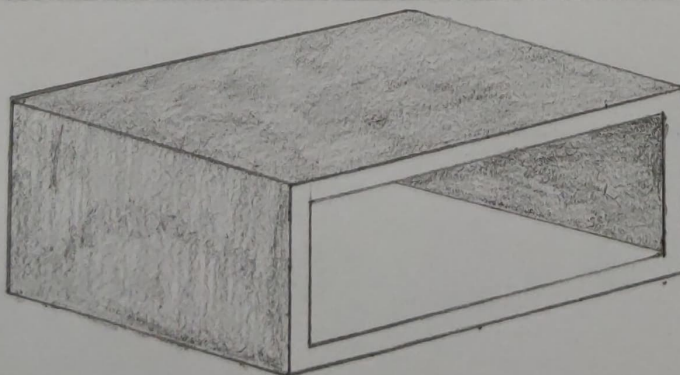


Fig. Free hand sketch of the solution to question #

7.3 Stepwise procedure:

- Step 1.** Draw a rectangle of dimension (60×40)mm using "RECTANGLE" command, in the front view.
- ② Now by moving in SW Isometric view, use the "EXTRUDE" command to convert the 2D object into 3D region by dimension of 50mm.
 - ③ By moving into the SOLID menu, use the "SHELL" command (it converts 3D object into hollow shell with wall of specified thickness) by selecting whole object and making 5mm as offset distance.
 - ④ Now, click on VIEW available in RIBBON and also confirm that it is first angle projection.
 - ⑤ Measure the sides of object using DIMENSION command.
 - ⑥ Using "TEXT" command, name the necessary terms if required.

8. Commands used:

S.N.	Command	Use
1.	UNITS	Used to set unit-type & precision.
2.	LIMITS	Define workspace & give it boundry.
3.	ZOOM	Expand/Contract the work area.
4.	RECTANGLE	Used to draw rectangle.
5.	EXTRUDE	Creates a 3D solid from enclosed area.
6.	SHELL	Converts 3D solid into hollow shell.
7.	TEXT	Used to write text in the file.
8.	DIM	Used to write dimension of object.
9.	DIMSTYLE	Used to change size of arrows, etc.
10.	VIEWBASE	Used to change views From top to Front, etc.

9. Result:

Thus, by the use of AutoCAD 2021 we are able to draw solids of desired combination by using different types of commands, dimensions, etc. of given length and conditions (inclinations) prescribed.

Faculty Name		Date of Submission	
Signature		Marks	