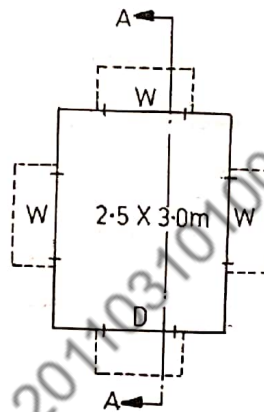SRM Institute of Science and Technology
College of Engineering and Technology
Department of Mechanical Engineering

18MES101L - Engineering Graphics and Design

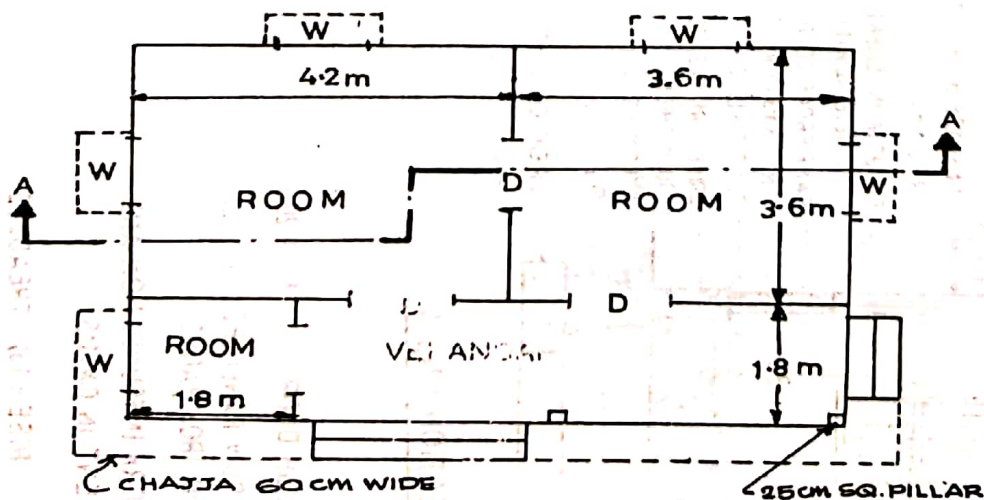| Reg. No	RA2011031010006	Ex. No	10
Name of the student	ANAS AHMED ATHER	Week. No	12
Department	CSE-IT	Title of the exercise	Building Drawing
Section	T1	Date	24/01/2021

Regular class problems (1 x 8 = 8 Marks)

1. Draw a plan, elevation and sectional view of a police outpost, the line plan of which is shown in the following figure. Also draw the sectional view on AA.

Extra problems for practice

1. Draw a plan, elevation and sectional view of a post office, the line plan of which is shown in the following figure. Also draw the sectional view on AA.

1. Exercise : 8

2. Date: 24 / 01 / 2021

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.
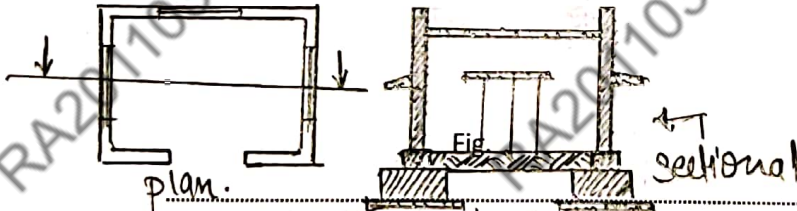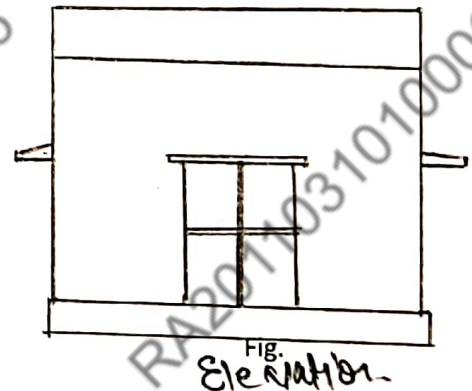
5. Software used: Auto CAD

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

→ Plan, section, and Elevation are different types of drawings used by architects to graphically represent a building design and construction. A plan drawing is a drawing on a horizontal plane showing a view from above. An elevation drawing is drawn on vertical plane. A section drawing is also a vertical but one that cuts through space

6.4 Terminology (with sketch):

→ Plan, section, and Elevation are different types of drawing used by architects to graphically represents a building design and construction.

plan.
Fig.
sectional

6.2 Real time example Picture

Fig.
Elevation.

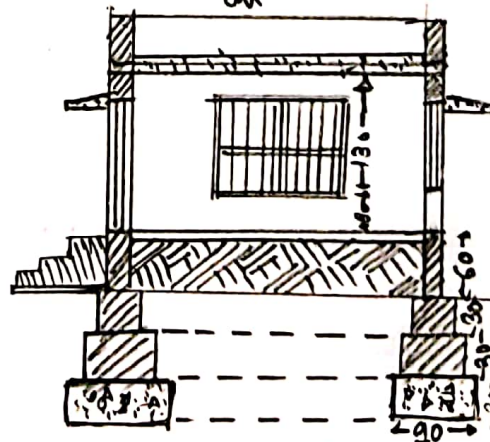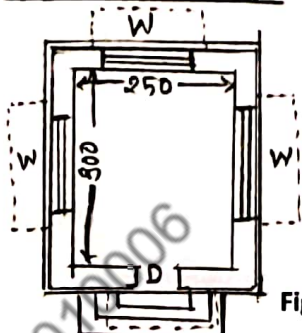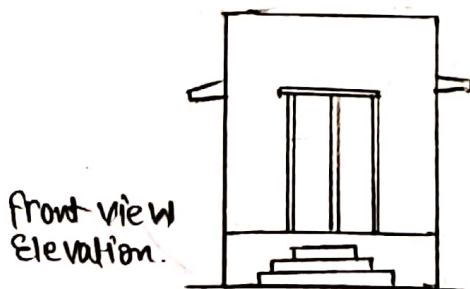**7. Procedure** (for solving question #):

7.1 Question outline : draw plan, elevation & sectional view of a police outpost.

7.2 Object : 250 X 300 room.

front view
Elevation.

Top view (plan)

sectional.

Door - 100 X 200
Window - 130 X 130
Stairs - Rise : 15
Thread : 25

Fig. Free hand sketch of the solution to question #

7.3 Stepwise procedure:

Step 1.

Set the limits, units and zoom(All) in drawing area.

Step 2:- Draw a top view plan, using make a rectangle with given dimension. using line, rectangle, offset & trim command.

Step 3:- Draw an elevation (front view) by tracing of top view plan line dimensions.

Step 4:- Similarly, Now we have to draw sectional view on A-A direction.

Step 5:- By using hatch, give texture of material.

8. Commands used:

S.N.	Command	Use
1.	Units	To specify units, precisions.
2.	Limits	To set grid.
3.	Zoom	To increase & decrease size.
4.	Rectangle	To create rectangle
5.	Line	To create straight line
6.	Trim	To delete unwanted lines
7.	Hatch	Fill pattern in enclosed area.
8.	Text	To write text.
9.	Dimension	To Accesses dimensioning.
10.	Copy	To Copies objects a specified dist.
11.	move	To move objects a specified dist.

9. Result:

→ The required building was drawn successfully by using AutoCAD software.

Faculty Name	Lakshman Sin	Date of Submission	
Signature		Marks	

Front View (Elevation)

Top View (Plan)

W

W

D

W

25.0

30.0

DOOR   -100X200
WINDOW-130X130
STAIRS -RISE   :15
          THREAD:25

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RA2011031010006

Autodesk AutoCAD 2021   Drawing1.dwg

Home Insert Annotate Parametric View Manage Output Add-ins Collaborate Express Tools Featured Apps

Line Polyline Circle Arc Move Rotate Trim Copy Mirror Fillet Stretch Scale Array Text Dimension Table Layer Properties Make Current Match Layer Insert Match Properties ByLayer ByLayer ByLayer Group Measure Paste Base

Draw Modify Annotation Layers Block Properties Groups Utilities Clipboard View

Start Drawing1*

[−][Top][2D Wireframe]

Extra problems for practice

Q.1]

FRONT VIEW ELEVATION

SECTIONAL VIEW ON A-A

W   W
400   360
ROOM   ROOM
D   D   D
ROOM D VERANDA
180   180

TOP VIEW (PLAN)

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Model Layout1 Layout2

Type a command

MODEL