



**Submitted By:-**

**Ihtisham Fida**

**I-D:-**

**“7209”**

**Subject:-**

**Introduction to Architecture & Town Planning.**

**Submitted To:-**

**Miss Alina Babar**

**Date:-**

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**Contact:-**

**0345-5329829**

**Iqra National University, Peshawar**  
Introduction to Architecture and Town Planning

Total Marks: 30

Time Allowed: 1 Week

Note:

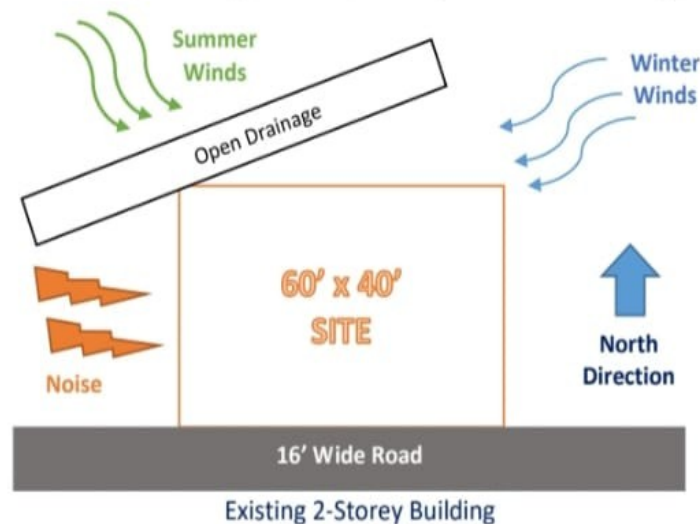
Attempt All Questions. Each question carry 10 Marks

Use internet to find climatic conditions or ask your elders

Those who don't know the usage of Microsoft Word can write answers manually and paste/sketch pictures with it where necessary.

Q1: Take any building from internet, put its picture in Microsoft Word and explain its positive and negative points according to the principles of design. What could be done to make the building more attractive? Answer must be at least 200 words. **(CLO1-PLO7)**

Q2: Design and sketch an ideal single storey house on the site shown below. The design should be free hand and can be drawn on graph paper. If a graph paper is not available then make a grid of 5'x5' on a separate white A4 size paper. The house should be naturally ventilated and have natural lighting. Also, it should be free of noise. The site is located in Peshawar. Label or explain the Plan neatly. **(CLO1-PLO7)**



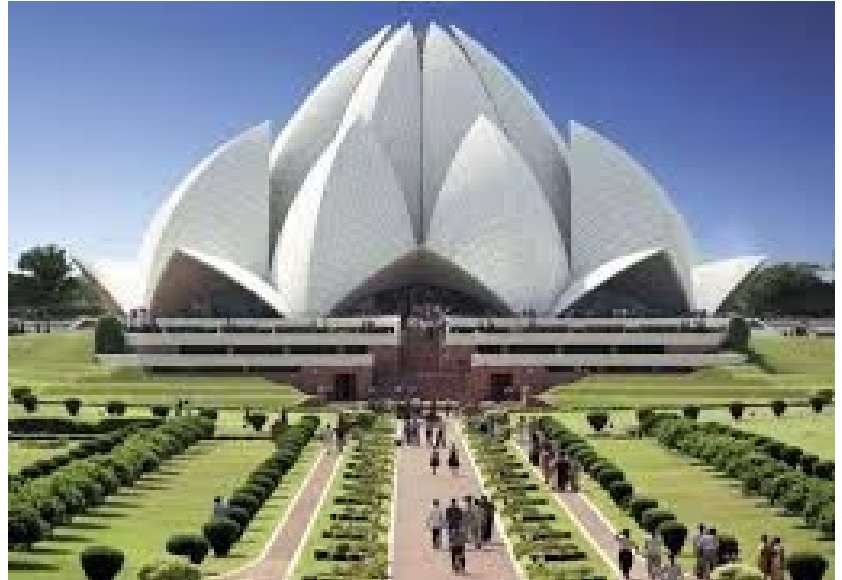
**Site Problems:**

- Open drainage in direction of summer winds which is a major source of bad smell
- Noise from west side and Winter winds from north-east side
- Existing 2 storey building on south side blocking some solar radiations

Q3: Select a site at the place where you live. Do Micro site analysis of Site and make its sketch on another A4 paper and write about it in detail. You can take your own lawn as a site for analysis or any other site in the neighborhood. Additionally, make a solar path diagram for your area on a separate piece of paper to find the exact sun angles for both winter and summer. Watch videos on YouTube to understand and make Solar Path diagram. Use these sun angles to make a rough sketch of a room. Show window height, type of fixed sun shade used, angle and height of shade as well as its depth and width by keeping sun angles in mind. The purpose for the sketch is to show how winter sun is allowed and summer sun is blocked. **(CLO1-PLO7)**

## Question # 01

### Principles of design :-



( Lotus-Temple, India )

#### **Positive points according to principles of design:-**

- This building is symmetrically balance.
- This building shape, size and color are according to emphasis rule of design.
- This building is harmony because of same conic shape.
- This building shows well unity.
- The building structure shows repetition in structure elements.
- This building also shows the pattern and rhythm.
- The rule of movement in this building is implemented by conical shape and arrangement of structure element.
- The direction of this building is diagonally.
- The alignment of this building is handle very well.
- This building is properly scaled.
- The elements of the building are in well proportional.

#### **Negative points according to principles of design:-**

- This building shows no contrast is color and shape.
- The element and color of this building shows no variety.

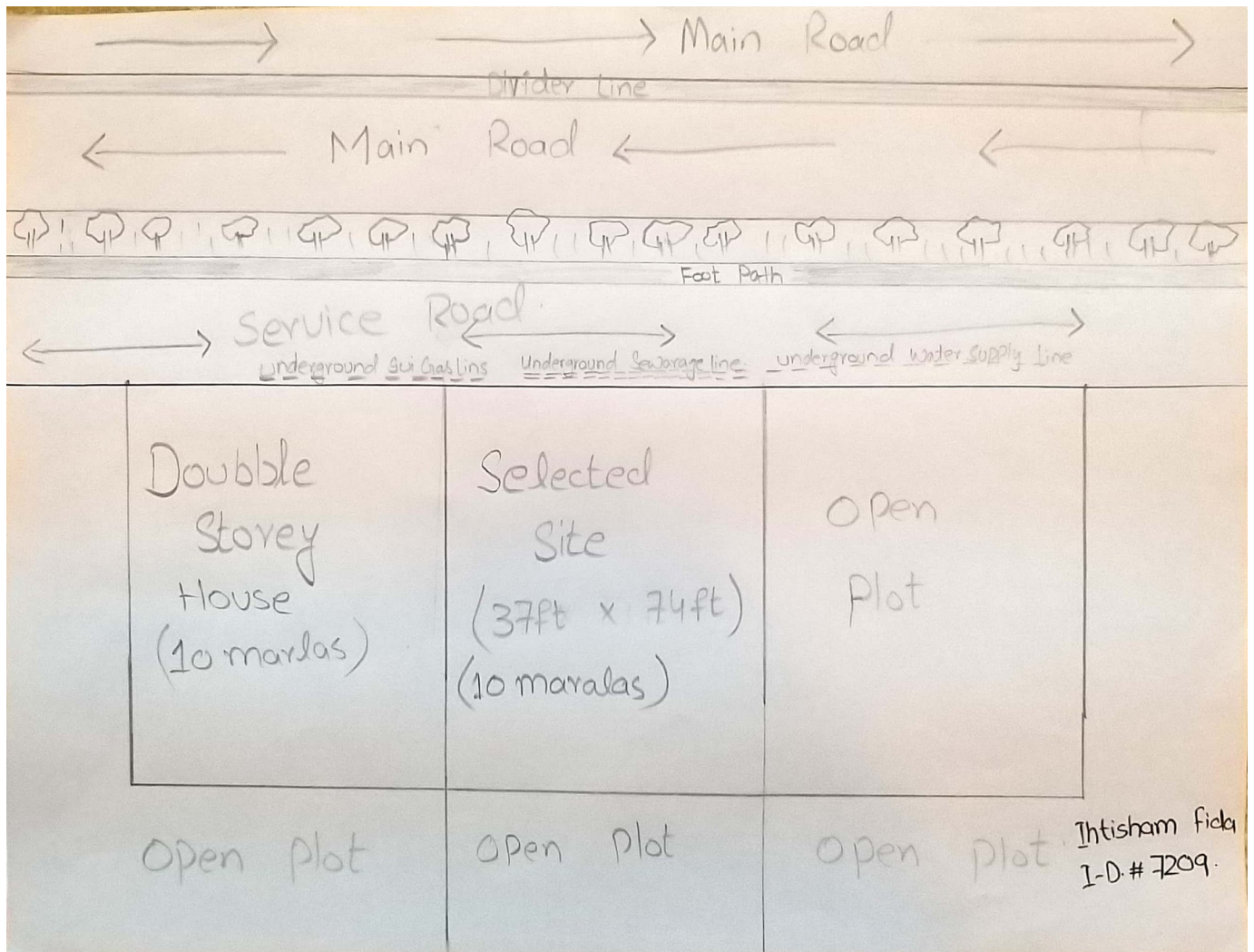
#### **SUGGESTION :**

This building will be more attractive if we add some contrast in color and shape. Now a days people like variety in structure then simple harmony structure , there is some variety in this structure than it will be more attractive. The shape of this building is diagonal architectural design , while now a day people prefer horizontal and vertical direction design.



### Question # 03

#### Micro site analysis of the selected site:-



We have selected a plot in Hayatabad Township in Phase-6.

The township residential area is divided into different phases of different plot sizes. The biggest plot size is 2 kanals (10800 sq.ft) and the smallest one is the 3 Marals (710 sq ft). The site we have selected is 10 maralas (2738sq. ft). The micro site analysis of the selected site is:

#### Hydrology:-

Hayatabad township is bound by Malagori and Khyber hill in west and south, in the east is Peshawar City and in north are small villages and recently developed townships. On south is the Bara River while down north is River Kabul. Ground water is the major source of public water supply.

There are two major aquifer systems;

1. Phratic (water table) aquifer system and
2. Confined (artesian) aquifer system.

Water table aquifer is found to a depth of 125 meters below ground surface and is mainly composed of coarse sand and gravels. Pumping test data of various tube wells in Hayatabad satellite town indicate good hydraulic properties of this aquifer system.

### **Geology:-**

The soil of this site consist of Granular Soil with various size of gravels.

### **Utilities:-**

The site has all the basic utilities e.g Electricity, Sui Gas, Telephone, Water Supply, Internet, etc.

### **Circulation:-**

This plot site is located in Hayatabad, Township, Peshawar. In front of this plot there is a main double road which is connected to Ring Road and GT. Road of Peshawar city. This road have local transport like taxi, buses. There is also a footpath for pedestrian access.

### **Natural Features:-**

There is a green belt in front of this plot, and play park on the back side .

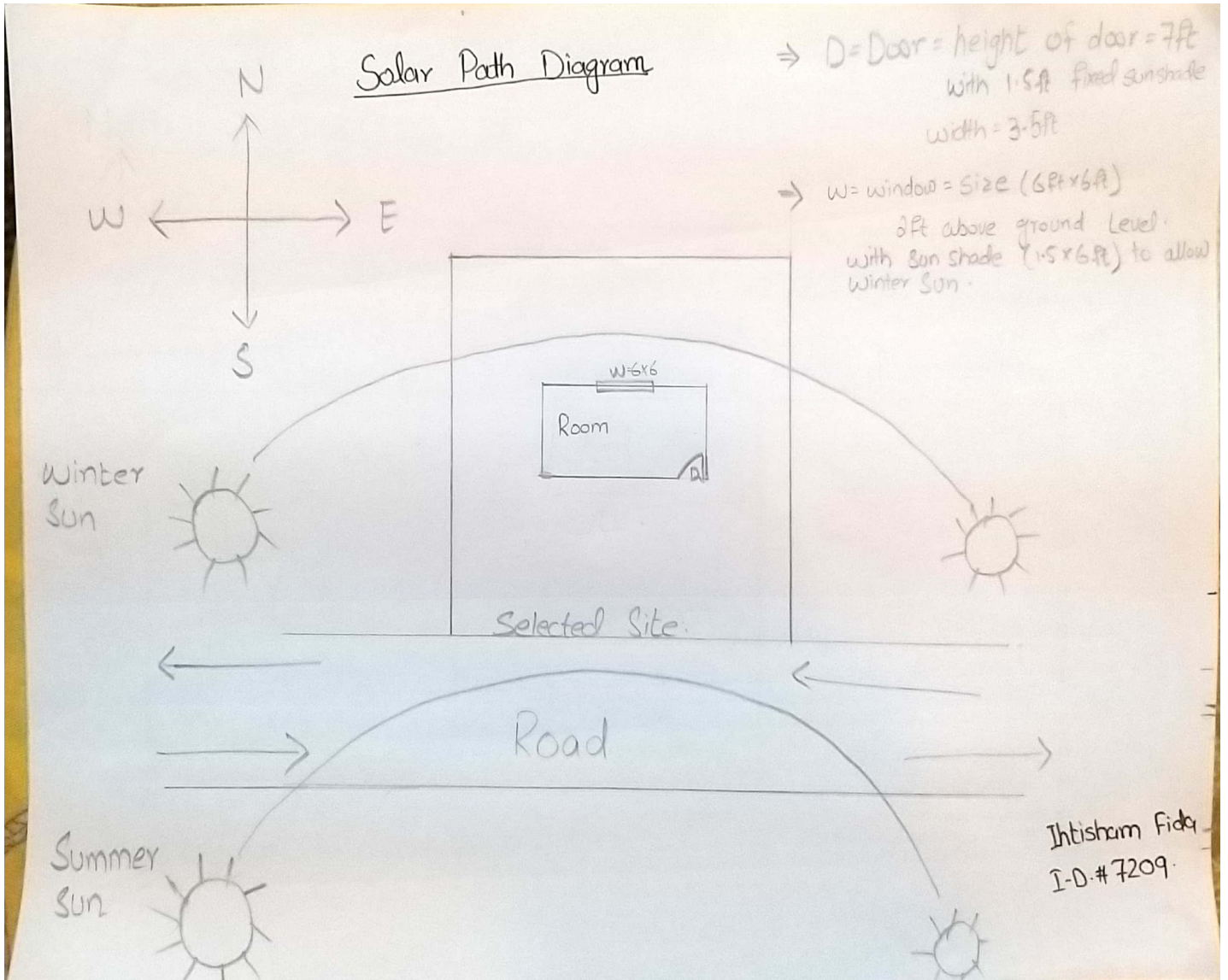
### **Vegetation:-**

As hayatabad is a residential township, so there is no vegetation site for vegetation . The soil of hayatabad township is granular soil, so it is not good for vegetation .

### **Slopes:-**

The gradient of this site is flat and the land-form is residential. The plot elevation is 1255ft above the sea level.

## Solar Path Diagram



**FINESH.....**