

Name:

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ID: F395: Sec: A.

Subject: Intro To Architecture
&
Town Planning.

Instructor:

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Question No 1:

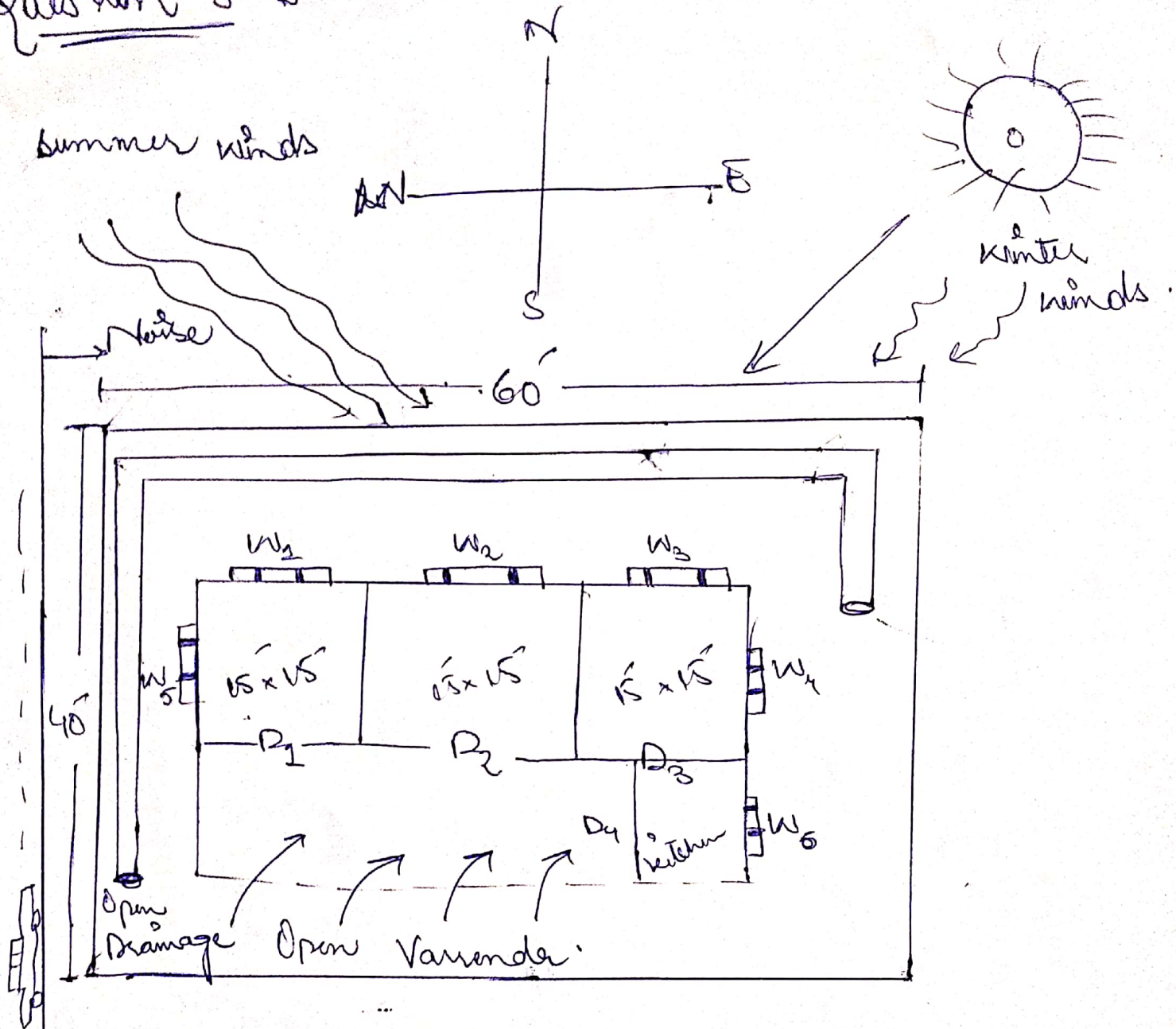
Ans): ADVANTAGES OF THIS DESIGN:

- As someone had mentioned one of the biggest advantage is of having almost double floor area, where same perimeter of ~~the~~ single floor houses.
- Better temperature regulation or less control of ground floor even if terracing of first floor has not been done.
- In an un-organized neighbourhood where setbacks and heights are not regulated in row housing, where houses circling the concerned house, have more than one floor then it is a slight advantage to follow similar pattern implemented by others. Ventilation system and lighting of floors above the ground floor will be better.
- Multi-storied houses are known to cater a better population density. More people on a relative piece of land. In cities, due to high land cost and rising population influx, duplex or multi-storied buildings are a quick solution.

Disadvantages Of This Design:

- It increases the cost of a house as strong foundation bigger service core and stair case have to be designed.
- Maintenance cost may also rise.
- Money times compromise on carpet area has to be made. Even though duplex will have double the ground floor area but a duplex's ground floor will be smaller than a ground floor of a single floor residence on the same plot.
- A duplex a multistoried house is less human with respect to storied house.
- The top floor of a multistoried house is the hottest portion in composite climate if terracing has not done.
- In some cases a multistoried house blocks sunlight and ventilation to some extent. This can be taken to court, for legal action, in countries such as India.

Question No 2e



Roof area
 $= 60 \times 40 = 2400 \text{ ft}^2$

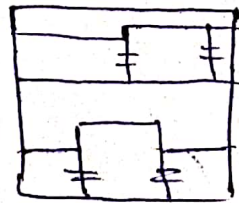
$60 - 10 - 10 = 40'$

15' Rooms

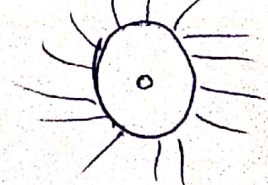
10' veranda

$15 \times 15 \times 10 = 2250$

Two-Story building



Blocking solar radiation



$$\text{Room 1} = 15' \times 15' \\ = 225'$$

$$\text{Room 2} = 15' \times 15' \\ = 225'$$

$$\text{Room 3} = 15' \times 10' \\ = 150'$$

- ① The open area is $60' \times 40'$ plot.
- ② $N=5'$, $W=10'$, $E=10'$, $S=10'$
- ③ Boundary wall 4 side height $12'$, $9''$
- ④ Three bed rooms + windows + ventilators + height $10'$
- ⑤ Door, front window, back.
- ⑥ Veranda open for ventilation.
- ⑦ Open back, smell reduce drainage
(over open, pollution, insects & diseases).
- ⑧ White and better temperature, pleasant weather.
- ⑨ Summer green shelter are used for block the sun radiation.
- ⑩ In south two story building the sun radiation are blocked.

Question No 3:

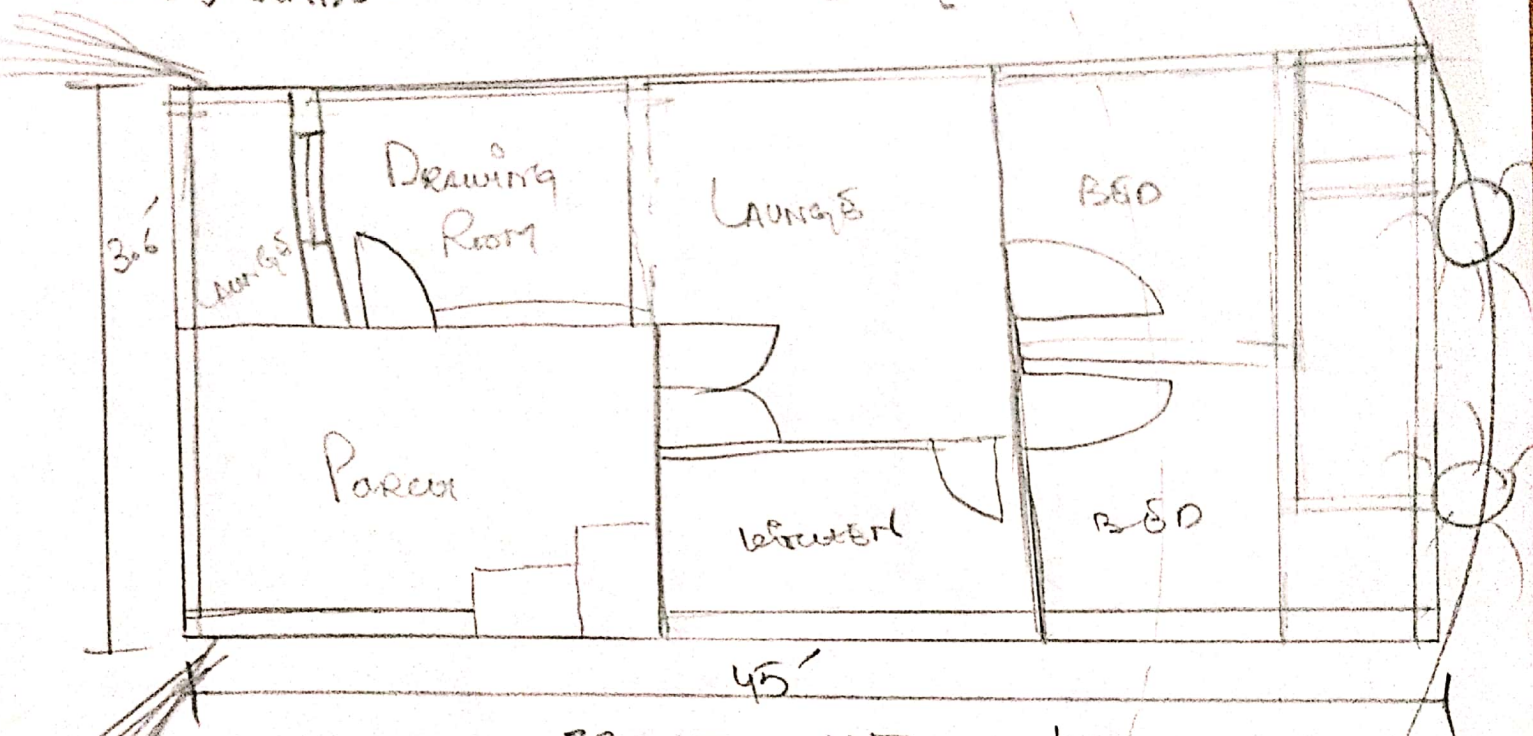
Province: K.P.K

City: Peshawar

SUMMER WINDS:

Winter Sun
32°

Summer Sun
27°

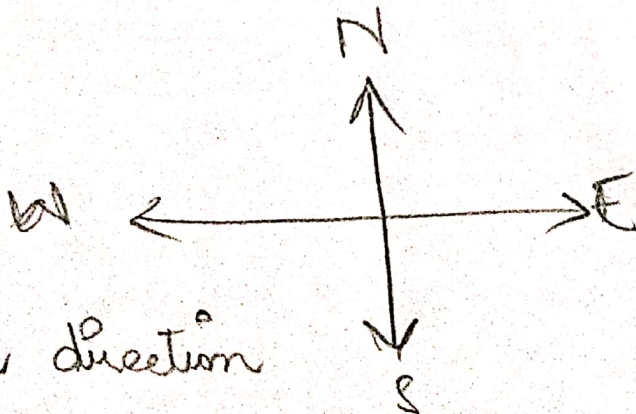


39 meter distance from
Main road.

WINTER WINDS

Winter Sun
12°

Summer Sun
27°



- 1) Sun direction
- 2) Wind direction
- 3) Drainage flow.

4) Neighborhood

5) Noise:

↳ Heavy vehicles passing through road makes more noise in day time & less noise at night.

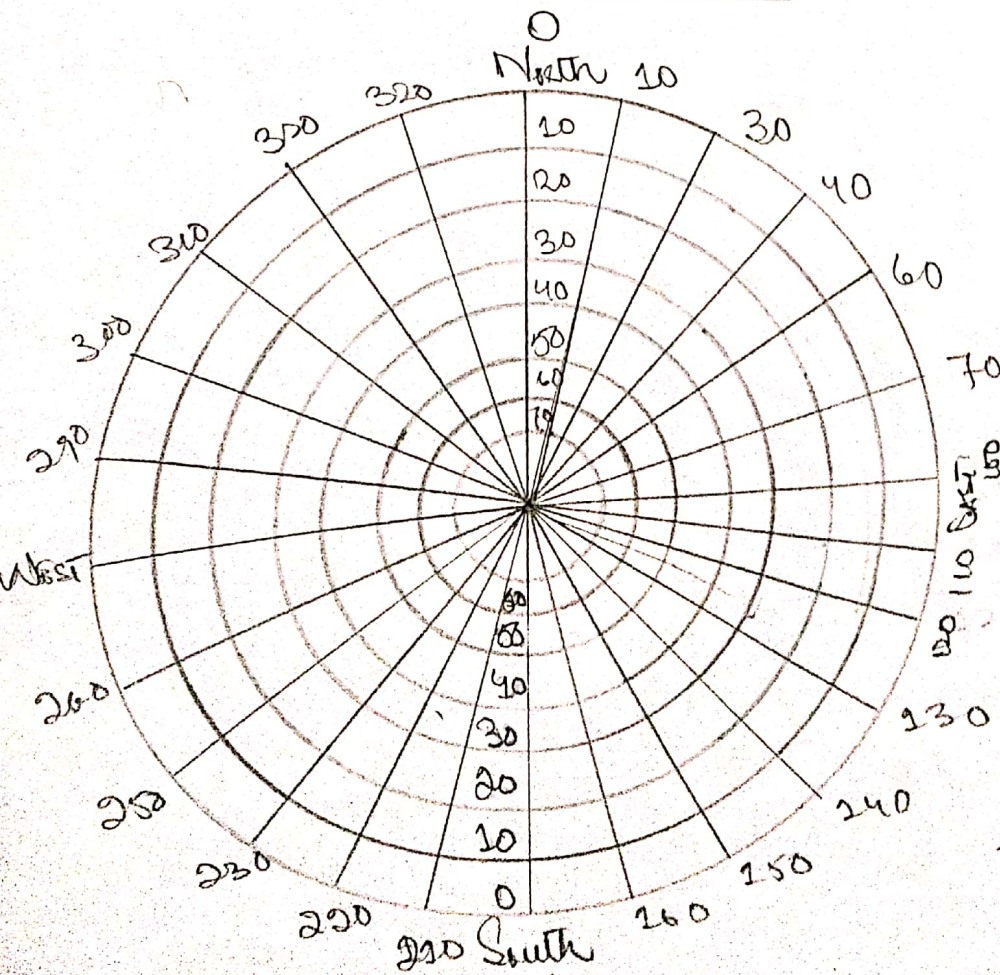
6) Access:

Access from main road is available.

For example:

Markets, Mosque hospital etc

→ SMAR, PATH, DISGRAY



DEVIATION	APPROX DATE
23.17	→ June 22
20	→ May 21 - 24 July
15	→ April 16 - 28 Aug
10	→ 30 Apr - 10 Sep
5	→ 21 Mar - 23 Sep
0	→ Feb 9 - 22 Nov
-5	→ 21 Jan - 22 Nov
-10	→ 22 Dec
-15	→ 22 Dec
-20	→ 22 Dec
-23.17	