

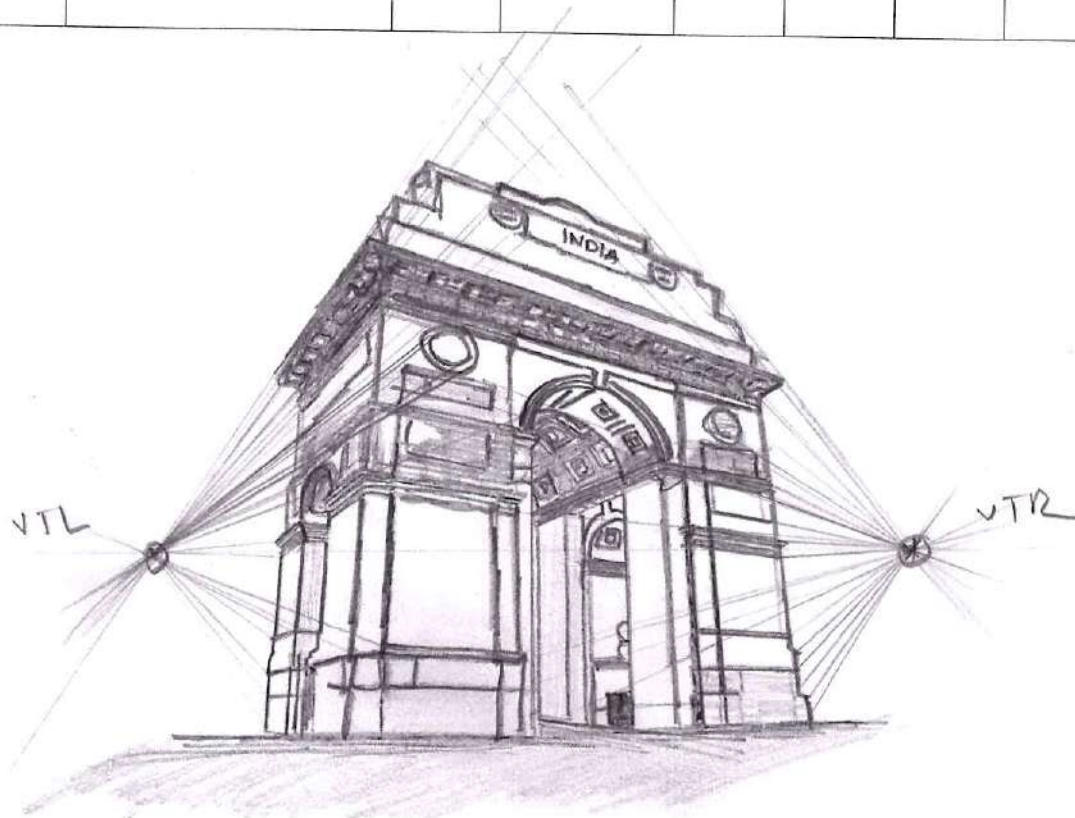


R.C.Patel College Of Engineering & Polytechnic, Shirpur

Department of Civil Engineering

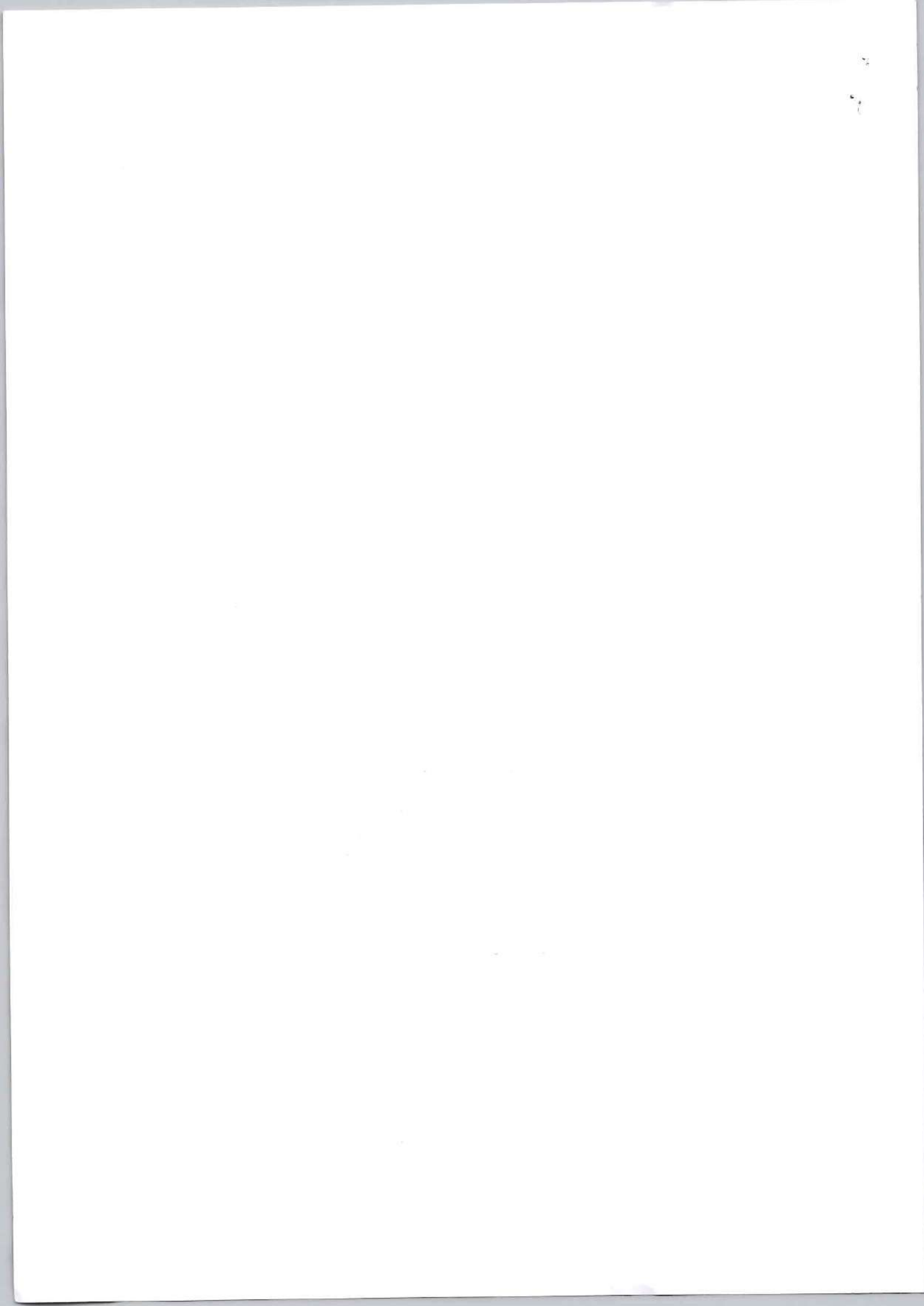
Course Title-Building planning & drawing with cad **Course Code -313009**
Programme Name -Civil Engineering **Semester-Third**

Unit	Title	COs	Learning hours	R Level	U Level	A Level	Total Marks
IV	Perspective Drawing	CO4	4	-	-	-	-



Subject Teacher

Mr.R.B.Patil



PERSPECTIVE PROJECTIONS:-

An object appears differently each time when viewed from different locations such a view of an object which changes w.r to the observer's location is known as perspective projections.

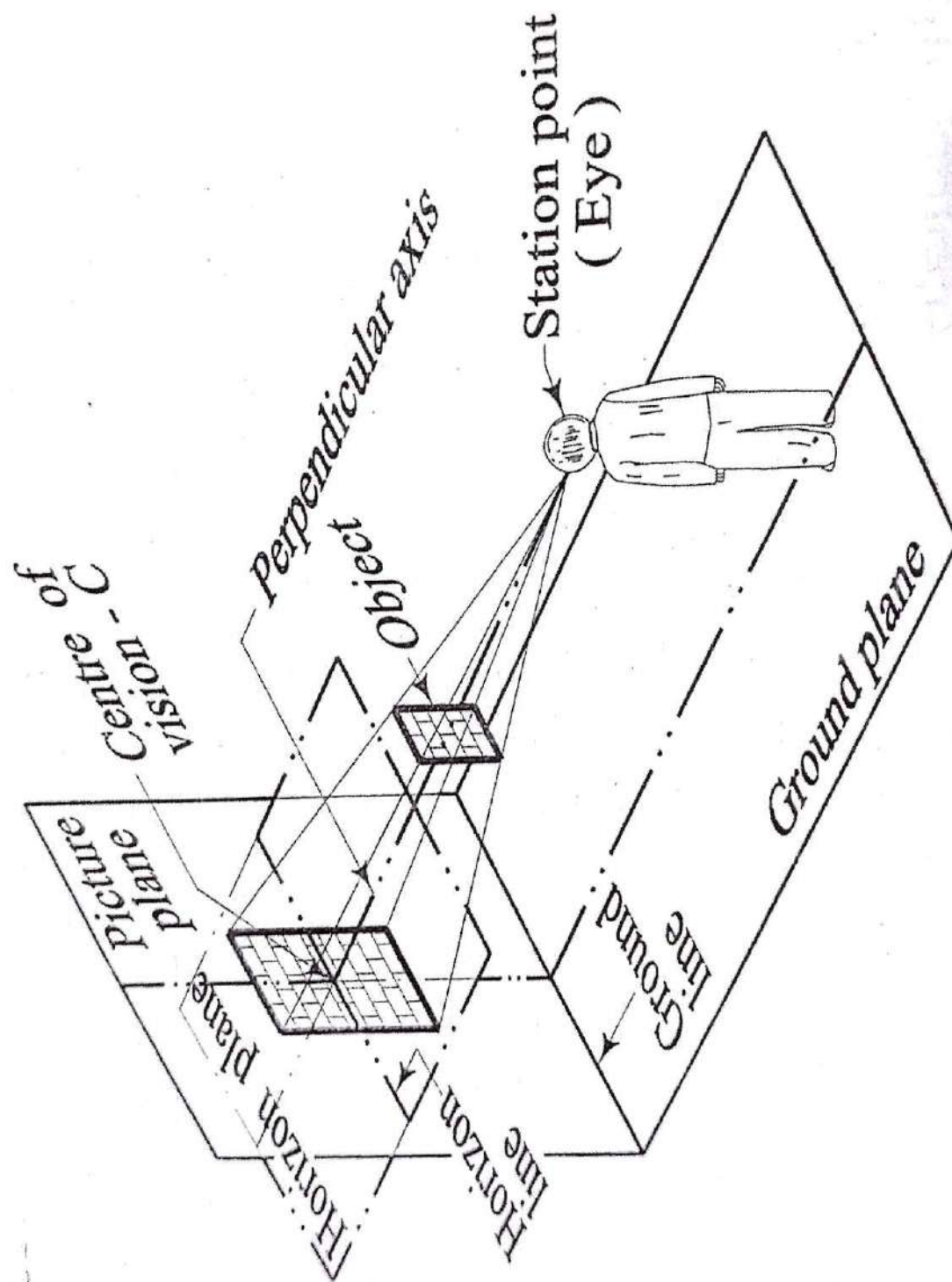
- perspective is a latin word

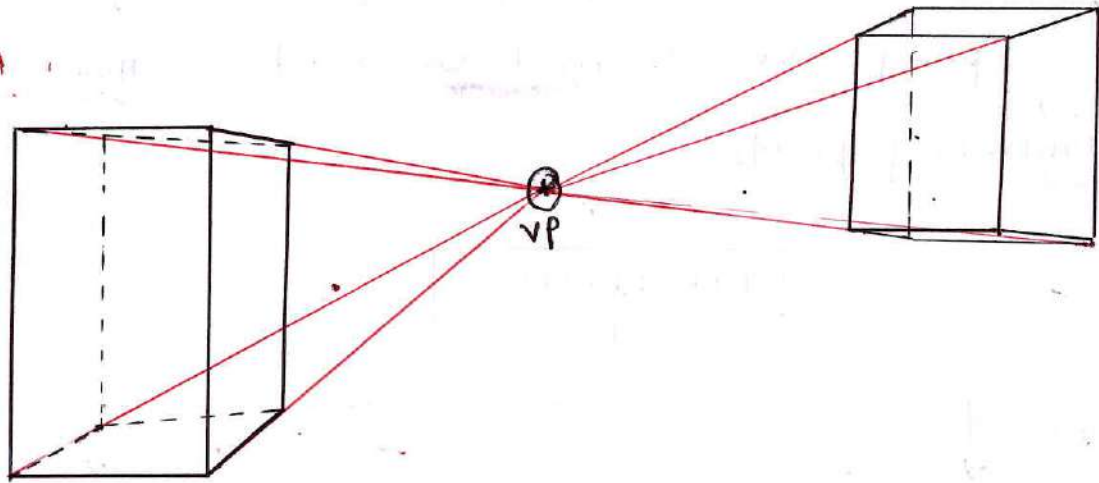
i.e per $\rightarrow$ through.
specere $\rightarrow$ Look

PRINCIPLE:-

Assume that an observer looks at a point, The point where he stands is called station point. (SP), Assume a vertical transparent plane is placed betⁿ observer and building, this plane will cut the rays coming from one point of observation and perspective view will be form on this plane, this plane is picture plane.

Defn:- The figure formed on the picture plane when visual rays from eye to the object cut the picture plane.

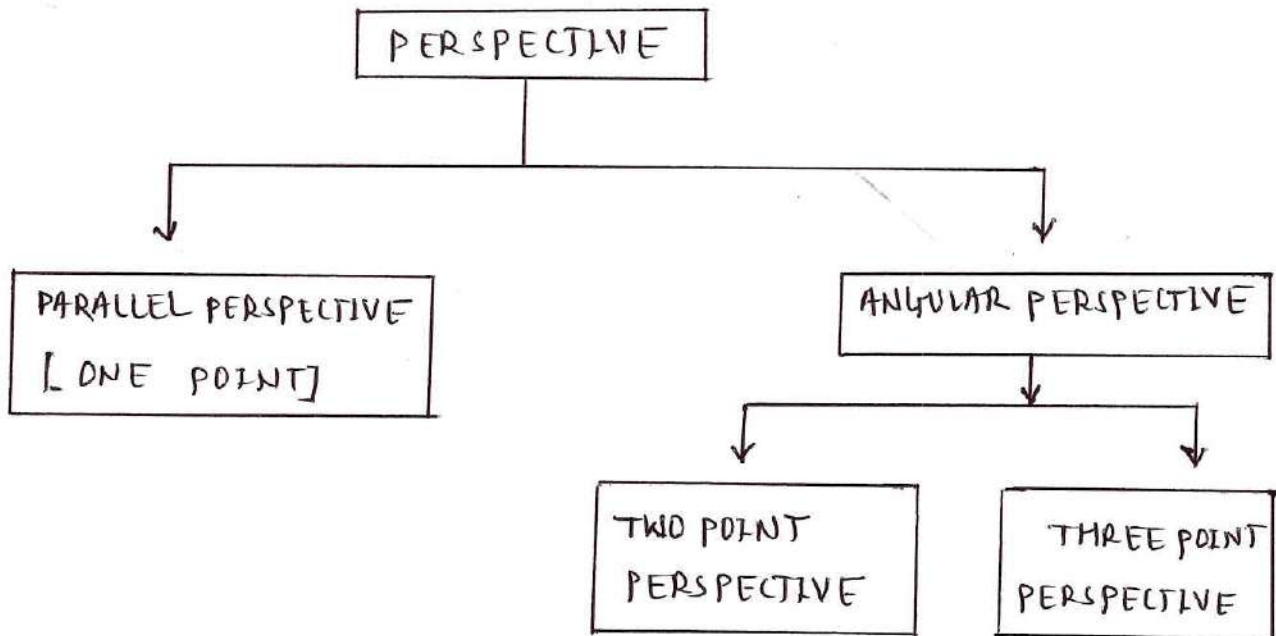




one point perspective.

CLASSIFICATION OF PERSPECTIVE:-

perspective classified ~~as~~ based on Number of vanishing points.

* one point perspective:-

- It consist of a single vanishing point from which line radiate.
- It is generally adopted on the central line and is called centre of vision.
- It is used for linear dimensions of street, track, train, row housing etc.

* Three point perspective!—

— plane is tilted so that three sets of planes and lines of the object are neither $\parallel$ nor $\perp$ to the picture plane.

— All the three sets of lines are at an angle to the picture plane.

— There are three vanishing points, one for each set, two are on horizon and one is above the (zenith) or below (Nadir) the horizon.

* With zenith $\longrightarrow$ Bird's eye view.

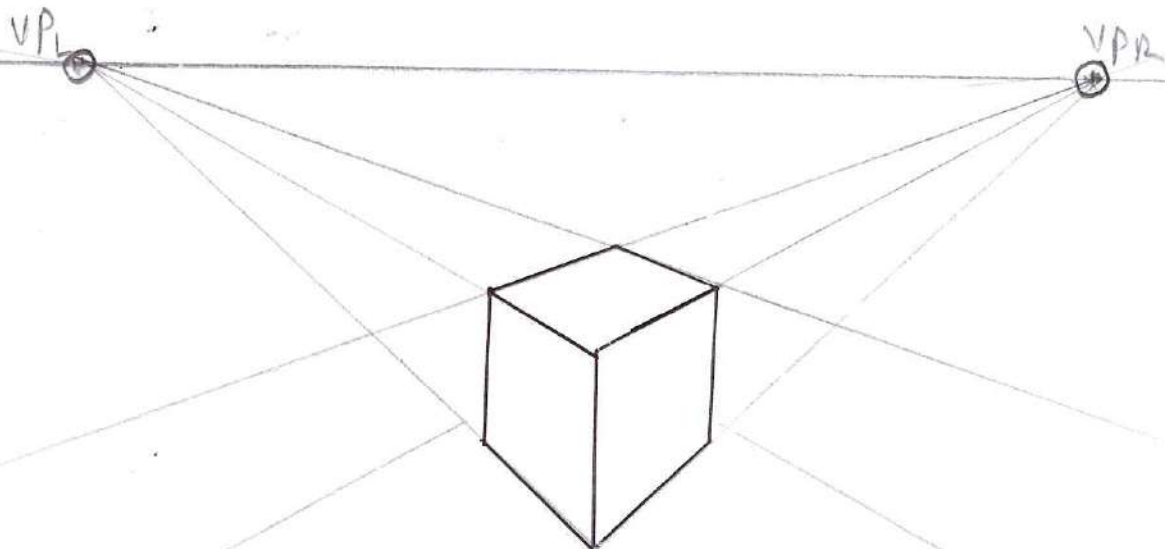
* With Nadir $\longrightarrow$ Worm eye view



Two point perspective

Two point perspective:- [Bird's eye view]

- observer make an angle of the building in front of him.
- in this two vanishing points for all lines of building at right and left one.
- most of the perspective are drawn with picture plane vertical, vertical edges of the object parallel to the picture plane and faces of the object inclined to the picture plane.

ex:-

TERMS USED IN PERSPECTIVE!—

* Ground line!— The line represents the ground level on which the observer is standing and meeting place of picture plane and ground plane.

* Station point/ Eye point!— (SP)
- It is the point at where observer is looking at the building.
- It is always in front of building and picture plane.

* Vanishing point (VP)!—
- It is a point at which a system of parallel lines inclined to the picture plane appear to converge.
- The imaginary point at which all rays vanish are called vanishing point.

* Eye level!—

It is a distance from the ground line where the eye of the observer is located.

- It is usually taken as 1.5m which is the eye level of average man.

* Angle of vision :-

- It is an angle subtended by eye in horizontal and vertical direction in which one can visualize the things clearly.
- Horizontal angle of vision generally 60°
- Vertical angle of vision = 45°

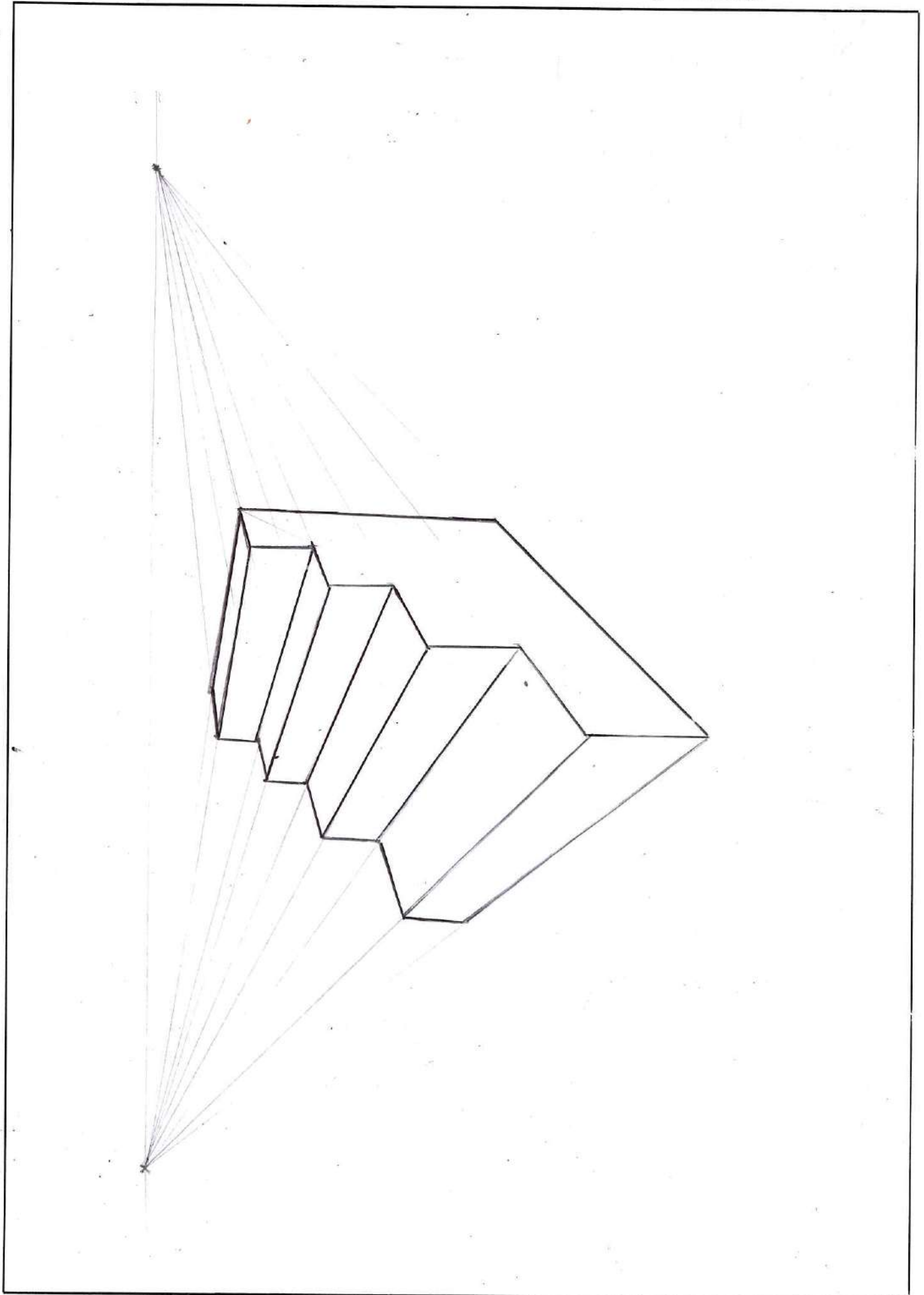
* Centre of vision :-

- It is orthographic projection of the station point on the picture plane
- It is also called principal vanishing point.

* Picture plane :-

It is an imaginary vertical transparent plane between object and observer on which the image of the object is projected and perspective is drawn.

* Vertical traces :- These are the points where the lines parallel to the sides of tilted plan drawn through the station point cut the picture plane.



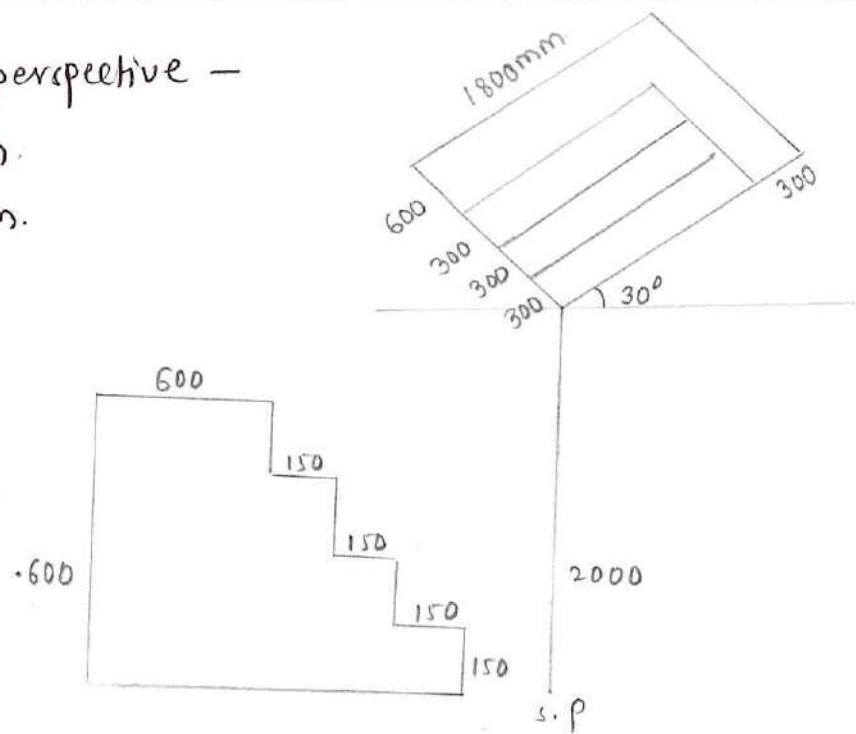
2 Draw two point perspective -

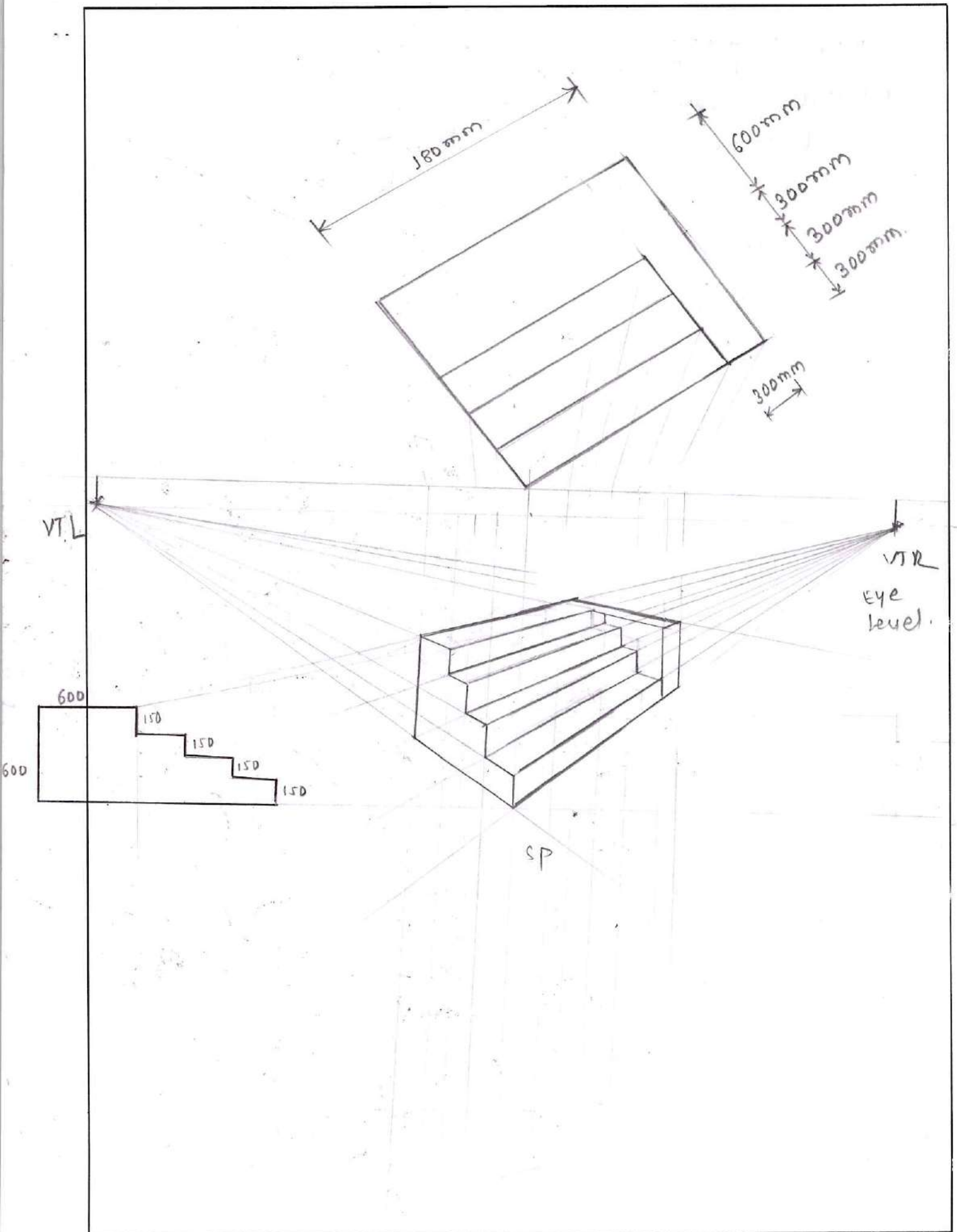
station point - 2 m.

Eye level - 1.5 m.

scale - 1:20

1 cm = 20 cm.





Station point = ~~9.5m~~
9500mm.

Eye level - 1500mm
from G.L.

P.P.

VTL

60°

130°

VTR

VTR

SP.

E.L.

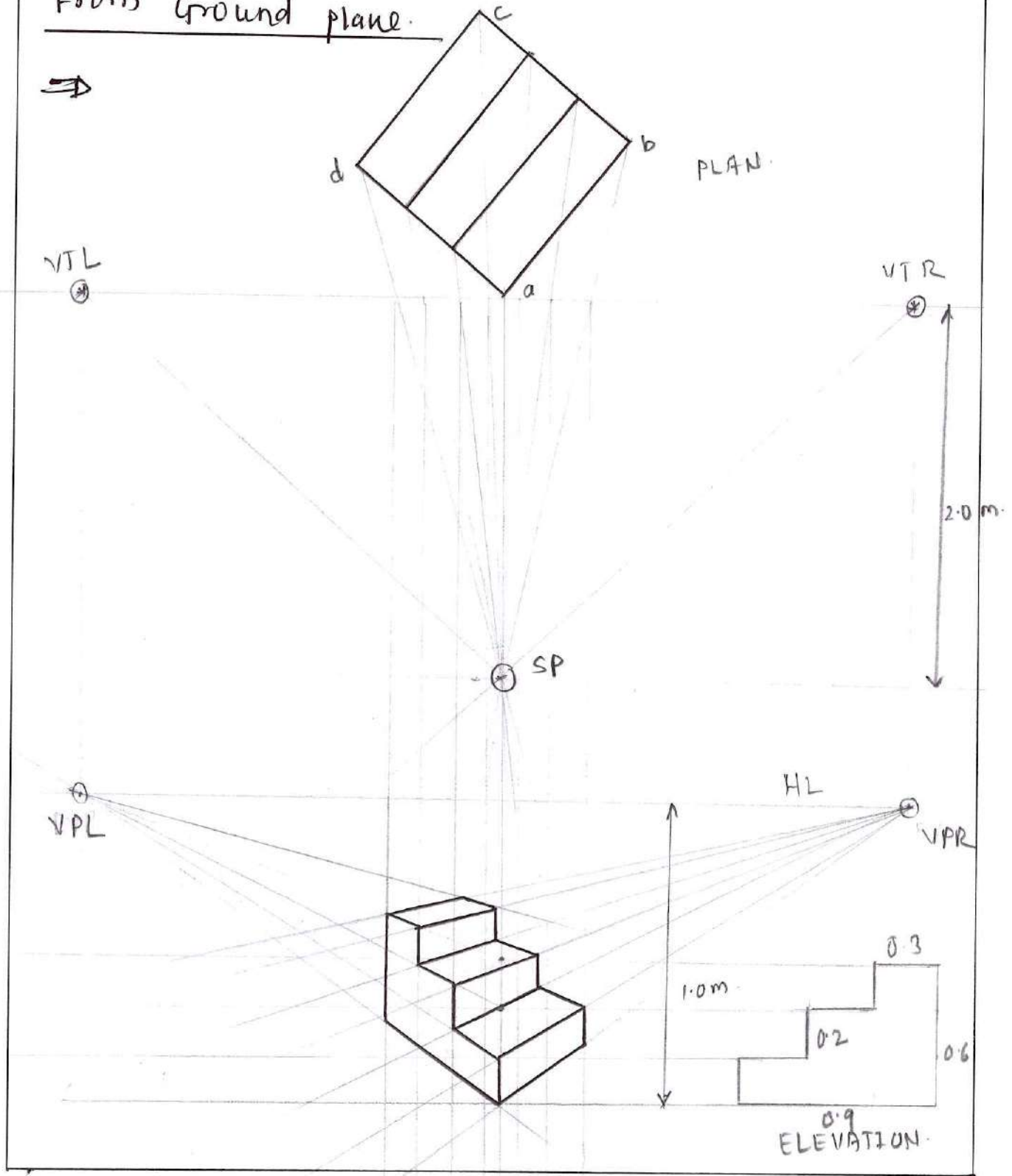
G.L.

1.25m

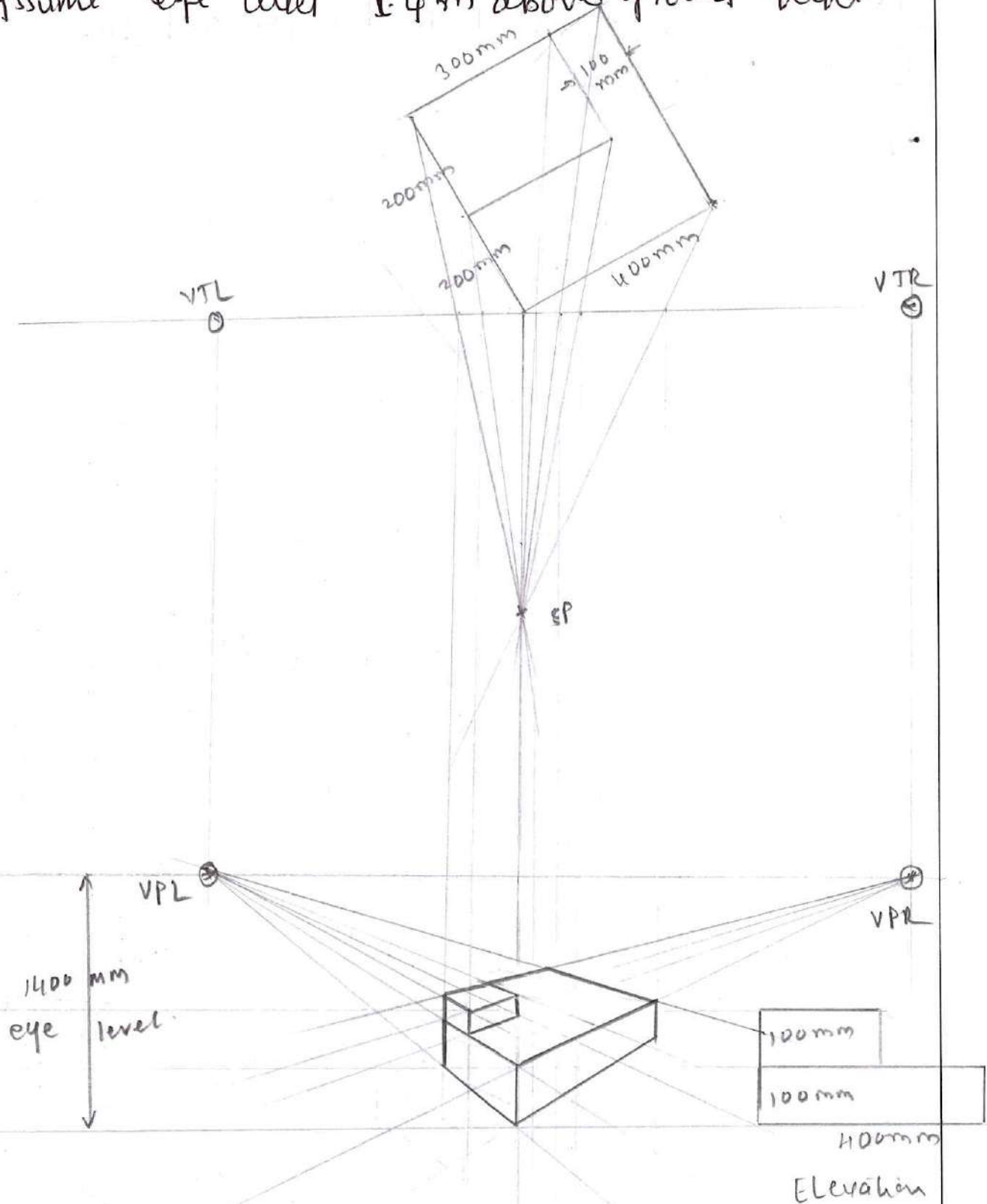
3.75m

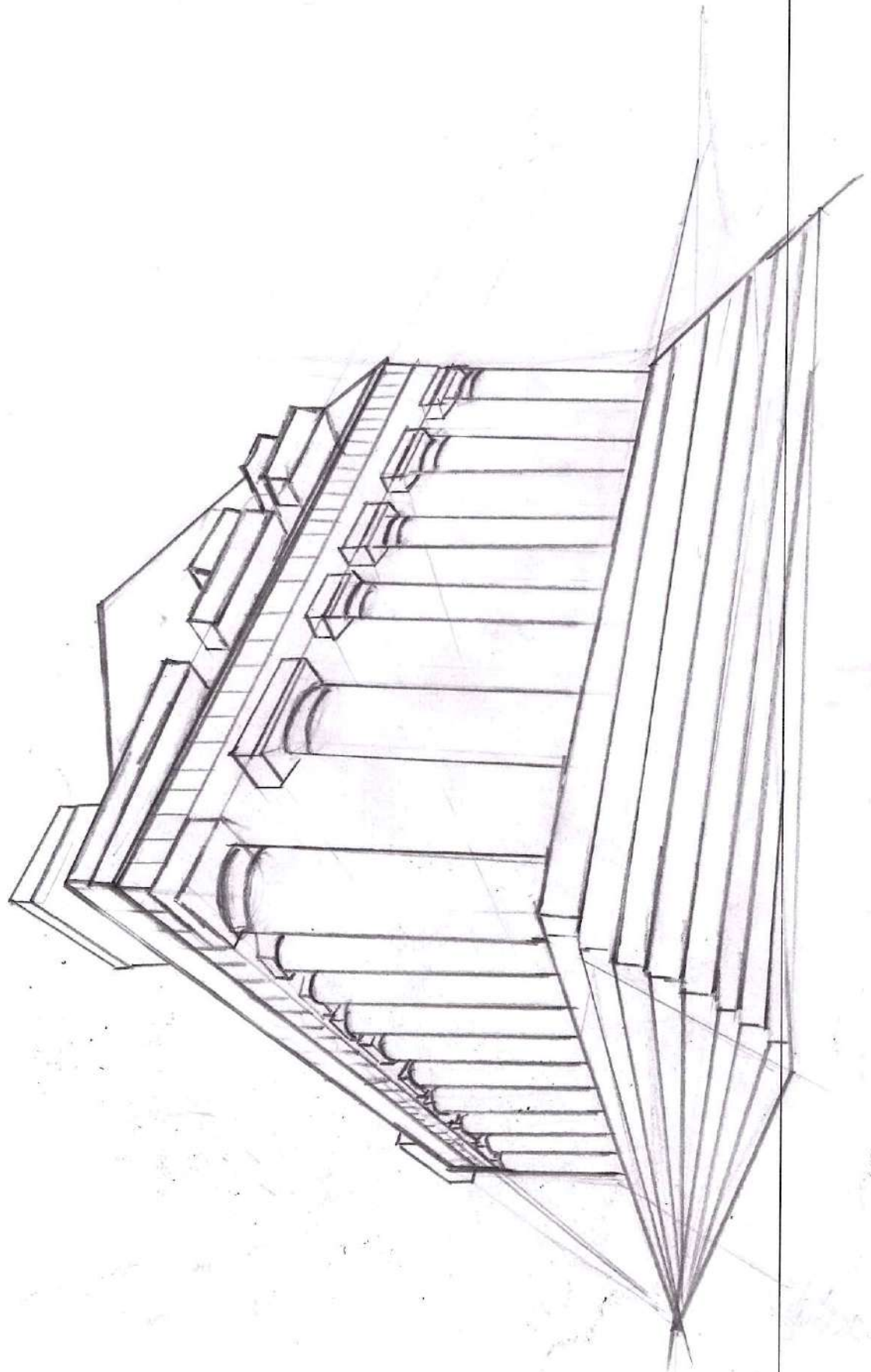
1m

* show the two point perspective of steps inclined at angle 45° to picture plane the station point is 2m m front of vertical edge and 1m from Ground plane.



Q Draw to a suitable scale a two point perspective drawing for pedestal.
Assume eye level 1.4 m above ground level.





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17/6/26

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