Practical No.13: Prepare report with labelled sketches of inspected staircase components during site visit.

I. Practical Significance

The buildings are constructed with multiple floors nowadays. The buildings require different means for vertical communication. Vertical communication refers to the movement of persons and goods vertically using staircase, ramps, lift, etc. A stair is a combination of steps that leads from one floor to the other. The overall area that includes the steps, hand rail, landing, etc. is known as staircase. The staircases are provided in different shapes. The shape of the staircases is selected based on the availability of the space and the aesthetics of the building.

II. Industry/Employer Expected outcomes (POs)

This practical is expected to develop the following skills for the Industry identified.

1. A student should be able to know various technical terms associated with stairs.
2. Classify stair on the basis of shapes and material used.
3. Draw suitable geometric design.

III. Course Level Learning Outcomes

Design the relevant means of communication for the given building structure.

IV. Laboratory learning outcome(s)

Prepare a site visit report with reference to Identify various components of stair case.

V. Relevant Affective Domain Relevant

Follow safety practices and precautions.

Maintain tools and equipment.

VI. Relevant Theoretical Background

The technical terms associated with the design and construction of stair are

- Step: It flat-topped unit used moving from one level to another.
- Tread: is the horizontal portion of step, which the foot placed while ascending or descending.
- Rise: is vertical distance between the successive tread faces, that is, it is the vertical distance covered in a step.
- Riser: is vertical portion of the providing support to the tread.
- Going: It is horizontal distance between two successive riser faces
- Flight: Its series of without any platform on landing or break in their direction
- Landing: This platform provided between two flights of stair. It may extend to full width or only to half width staircase. Former known as half-spaced landing, while the latter known as quarter-spaced landing.

VIII. Resources required

Sr. No	Particulars	Specification	Quantity	Remark
1.	Models of Staircase	Model showing all component parts of staircase.	02 No	

IX. Precautions to be followed

1. Type of structure.
2. Type of Staircase
3. Material and its proportion used.
4. Various parts of stair case observed during visit.
5. Use safety measures on site.
6. Listen and follow the instruction given by site in charge.
7. Maintain discipline during Visit.

IX. Procedure:

Field Visit Report

Date of Visit---------25 March 2025.

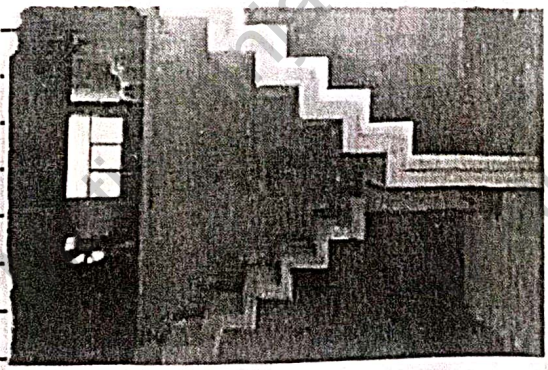
Site Address---------Taroda Naka Nanded.

Name of Project---------residential building.

Name of Contractor & Site Engineer---Rathod. M.S.

Status of project-Completed/ongoing----ongoing.

XI. Observation Actual Procedure followed – (Attached Photograph)



XII. Result

Design the all of the means of communication of all types of construction.

XIII. Interpretation of results

the technical terms associated with the design and construction.

XIV. Conclusions and Recommendations

The verticle distance between the naising of one right and the salit of the right immediatly.

XV. Practical Related Questions

Define vertical circulation.
Enlist the various parts of staircase.
State the importance of handrail, baluster, and Newel post
State the Requirement of good stair.
Enlist the type of stairs and situations where they used.

Q. 1) ——→ ?

Ans:- Verticle circulartion is the way people move beth level of a building such as by using stories ramps elevaters or escalators.

Q. 2) ——→ ?

Ans:- the main parts of staricase include tread riser stringer newel past balster handrail landing Balastrade gooseneck.

Q. 3) ——→ ?

Ans:- Handrails, bulusters and newel post are all important for safety when using stairs.

1] Hand rail :-
prevent falls and provide support when asending or desending stairs.

2] Ballasters :-
streingth handrails, keep then study and prevent people from falling through the railing

3) Newel pasts :-
support the handrailing of a staircase.

Q. 4 ——→ ?

Ans:- Agood staircase should be safe comfortable and functional. It should be designed to prevent accidents and falls.

XVI. References/Suggestions for further Reading

Sr. No	Link	Discription
1	https://www.youtube.com/watch?v=XsFeVuVQE-E	staircase components
2	https://youtu.be/ATGEhLFBtk4?si=WU792UXhW00920-X	staircase components
3	https://youtu.be/fC12ziLBok8?si=BRAmjcdcb766kD8j	staircase components