



# GOVT CO-ED POLYTECHNIC

BYRON BAZAR, RAIPUR(C.G.)

## LABMANUAL

Branch:CivilEngineering

Year&Semester:2<sup>nd</sup>Year/3<sup>rd</sup>Semester

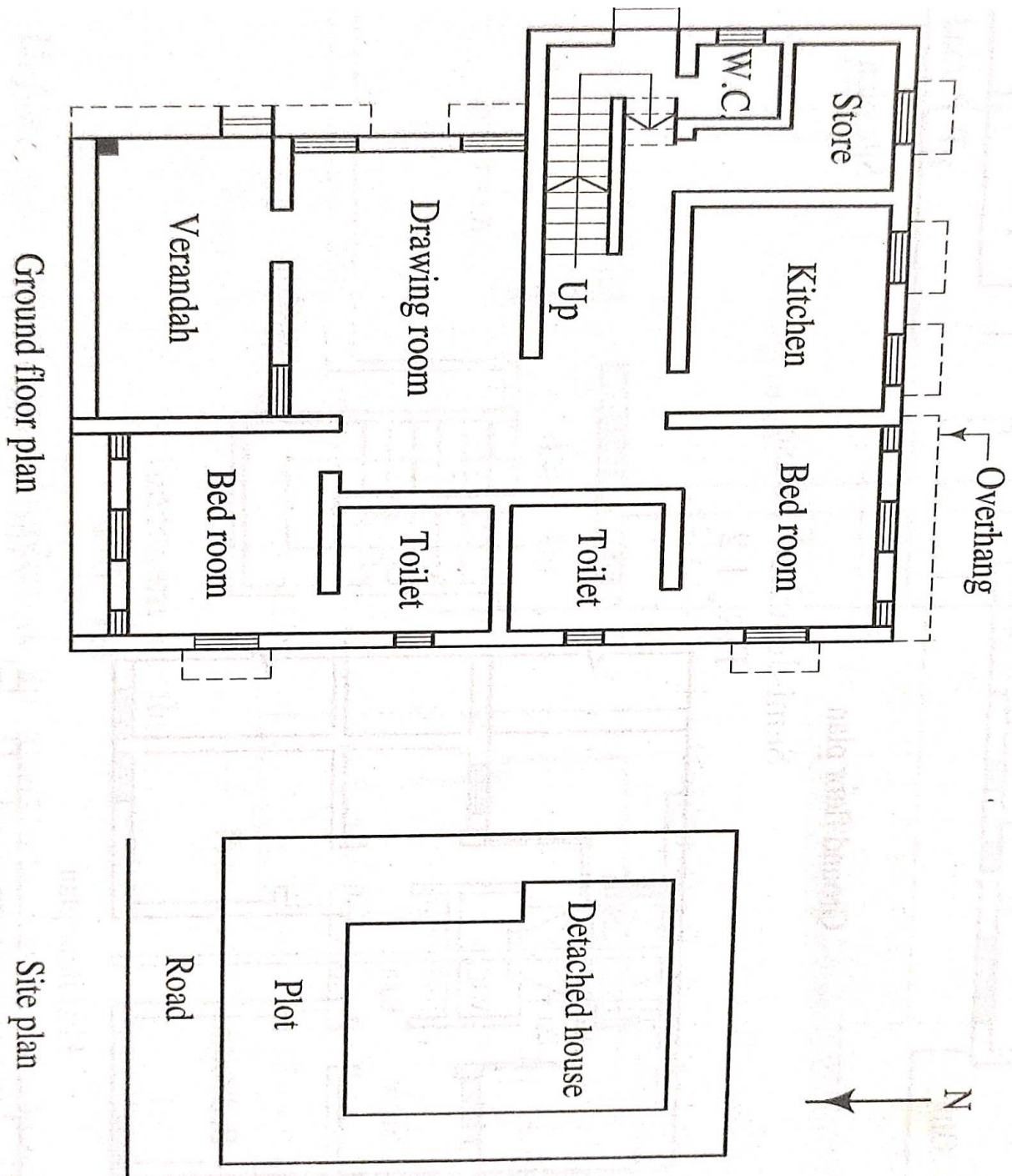
*Building Construction (Lab)*

## **List of Experiments**

1. To prepare layout of building: two rooms building with front verandah.
2. To construct brick bonds (English bond only) in one, one and half and two brick thick walls.
3. To construct brick bonds for L, T and cross junction.
4. Draw sketches of different types of doors and windows.
5. Draw sketches of different types of arches and lintels.
6. Draw sketches of various types of scaffolding.
7. Draw sketches of various types of floors.
8. Draw sketches of various types of roofs.
9. Draw sketches of various types of stairs.

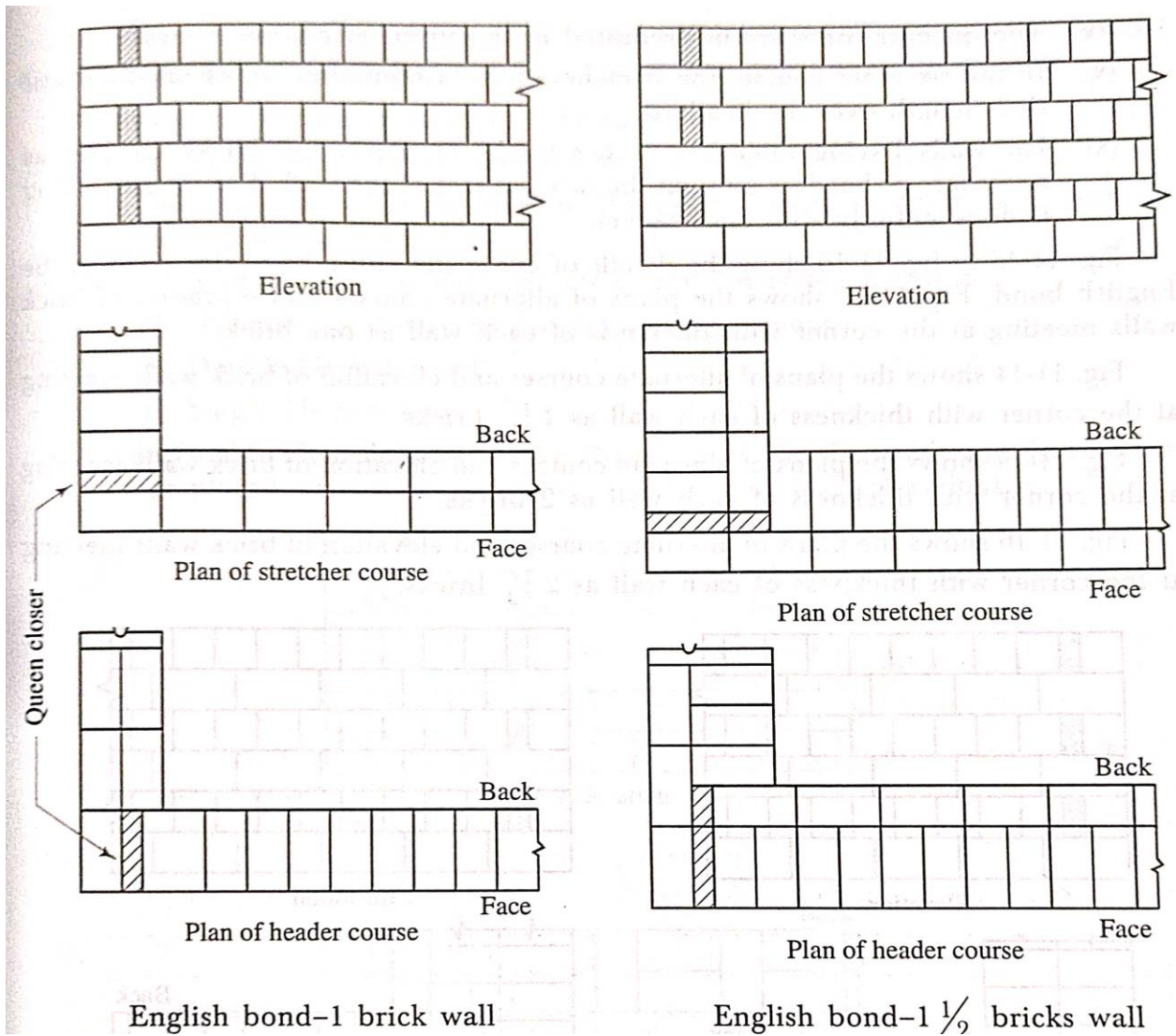
## EXPERIMENT-1:

**AIM:** To prepare layout of building: two rooms building with front verandah.



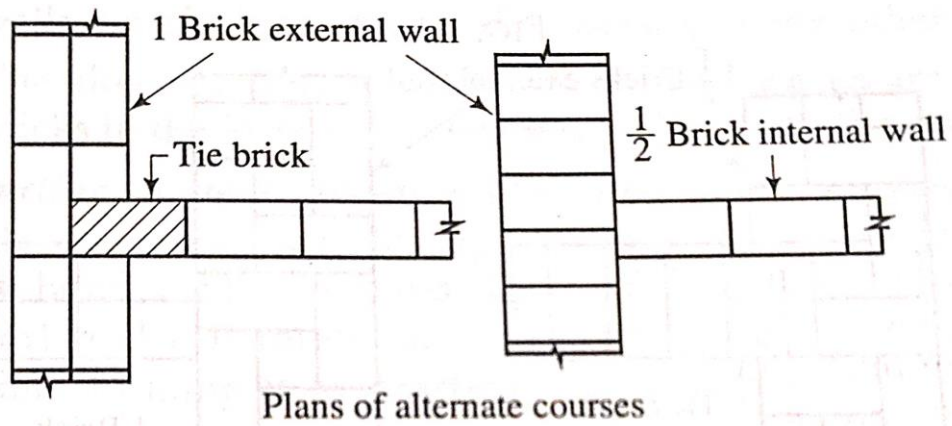
## EXPERIMENT NO. 2

AIM :To construct brick bonds (English bond only)in one, one and half and two brick thick walls.

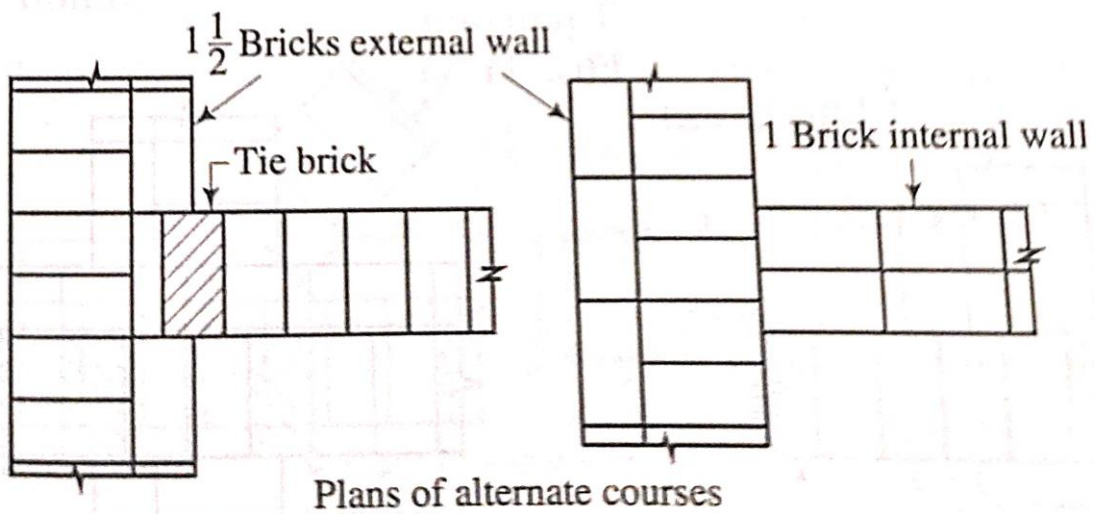


### EXPERIMENT NO. 3

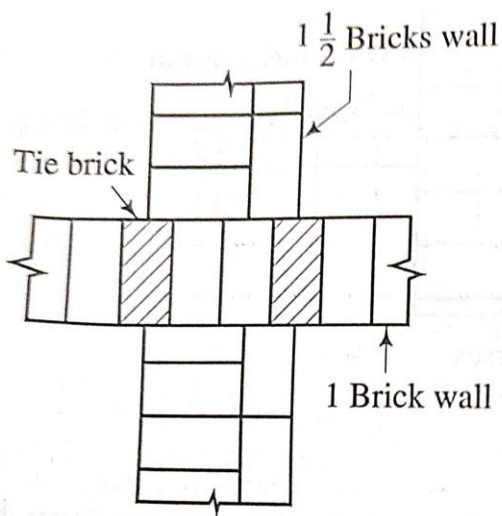
1. AIM: To construct brick bonds for L, T and cross junction.



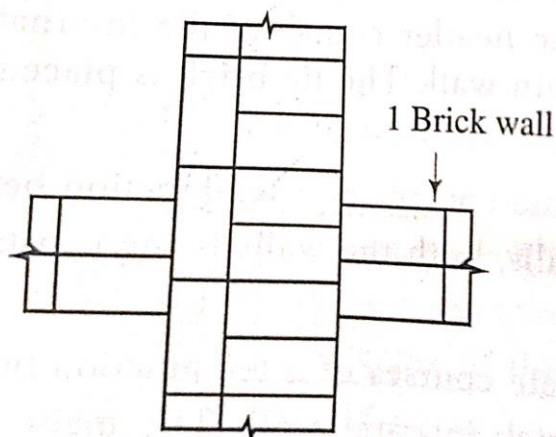
Plans of alternate courses  
T-junction  
FIG. 11-30



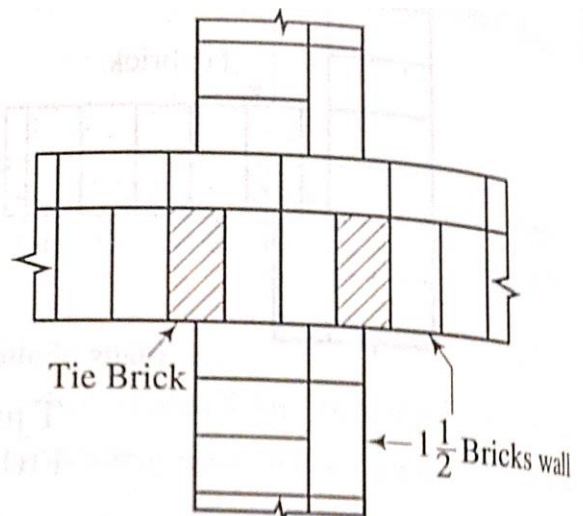
Plans of alternate courses  
T-junction



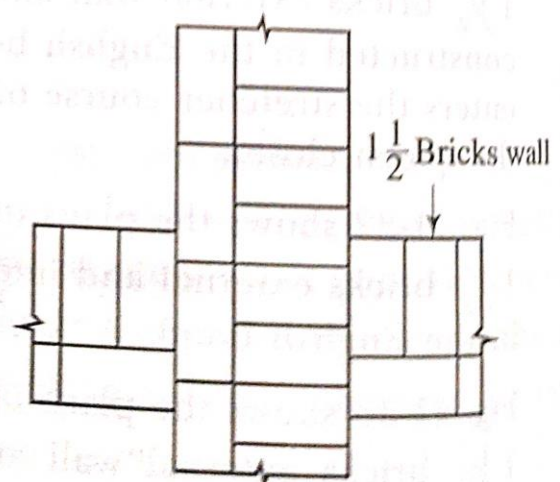
Plans of alternate courses



Cross-junction  
FIG. 11-34



Plans of alternate courses

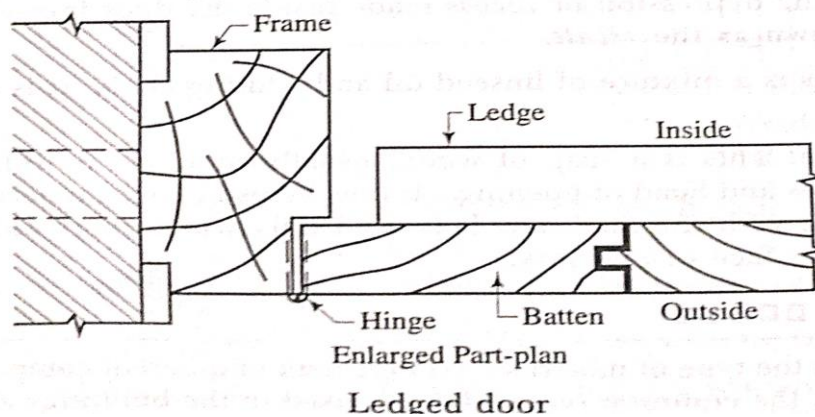
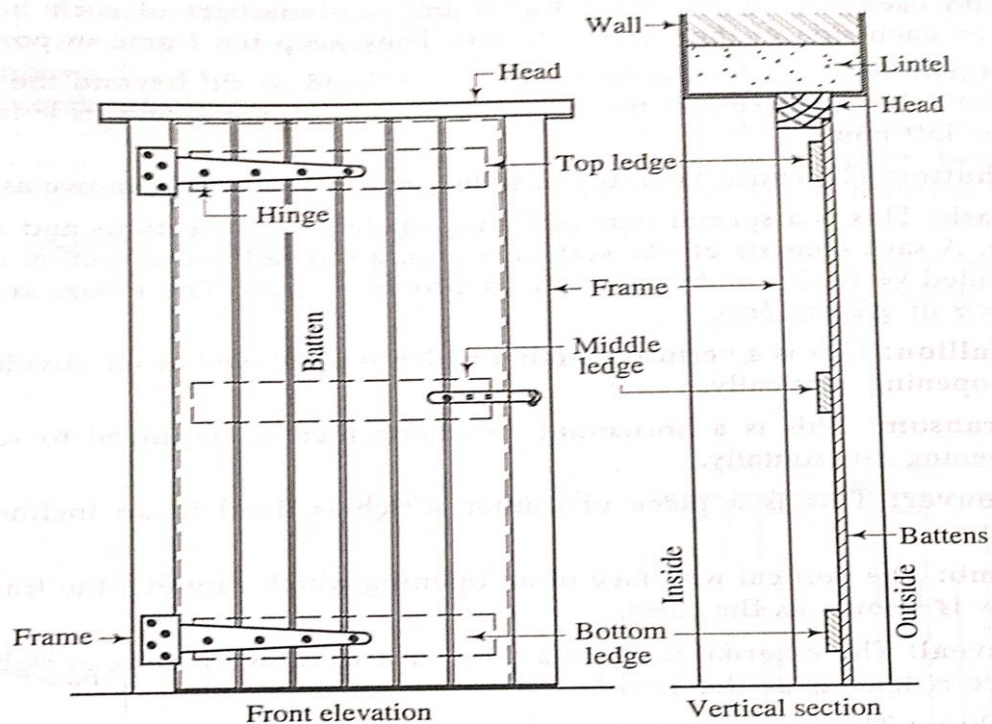
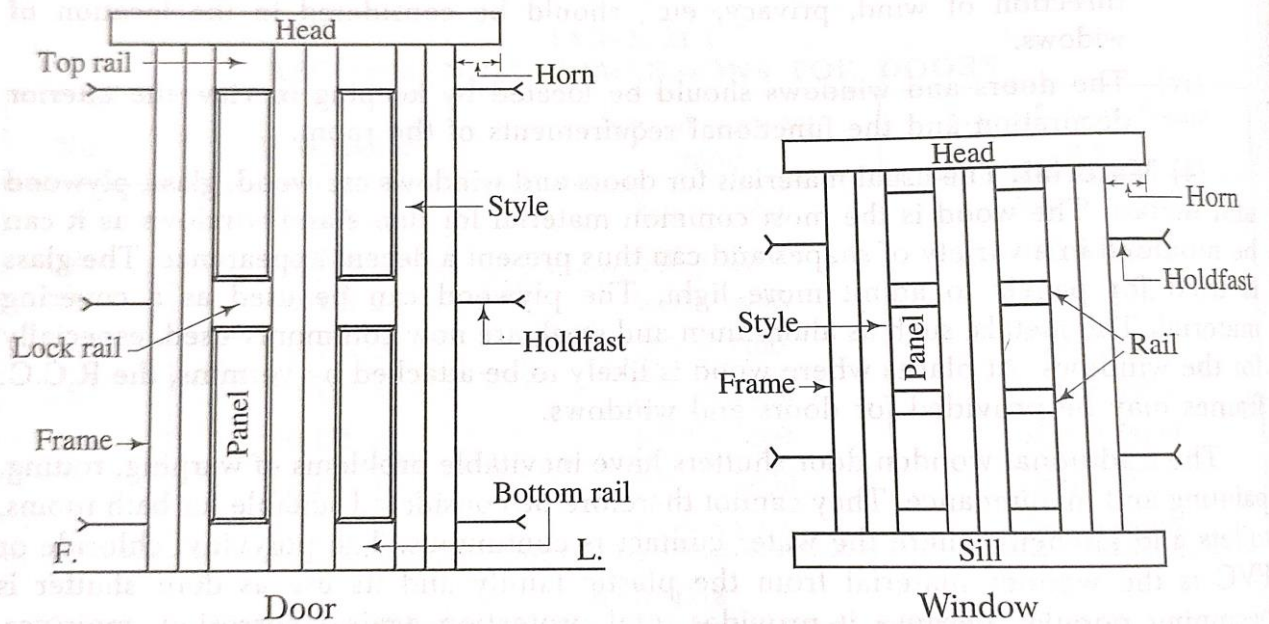


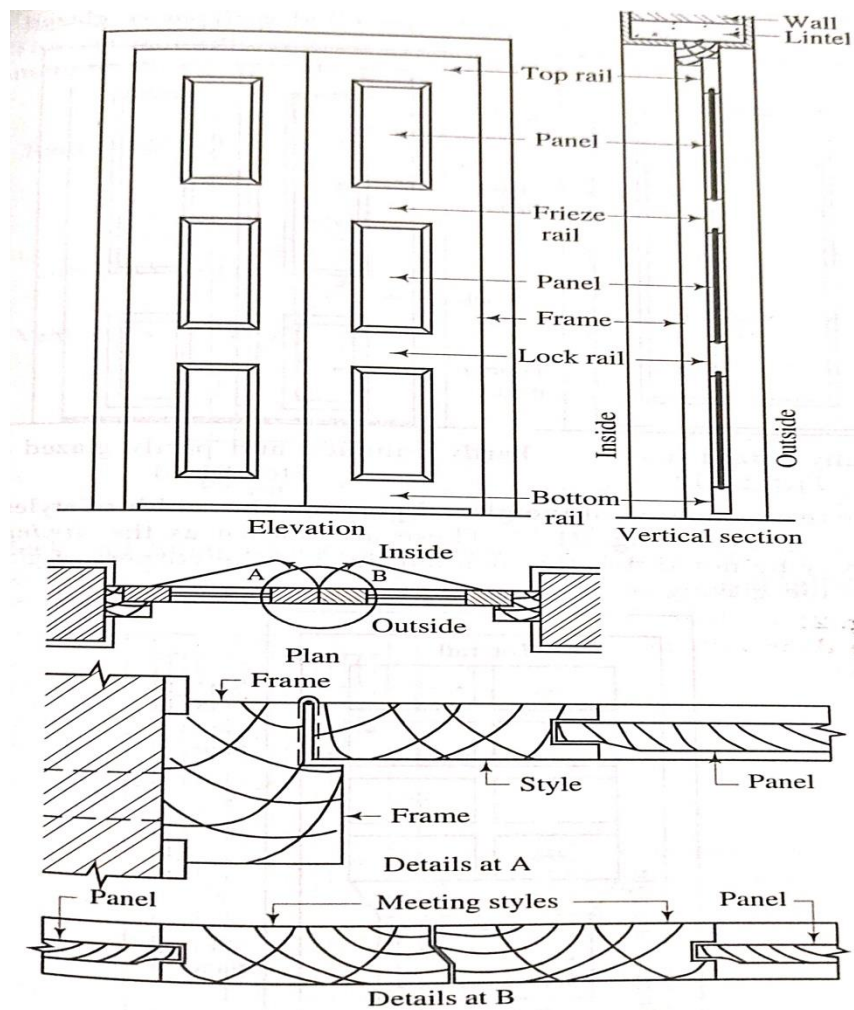
Cross-junction  
FIG. 11-35



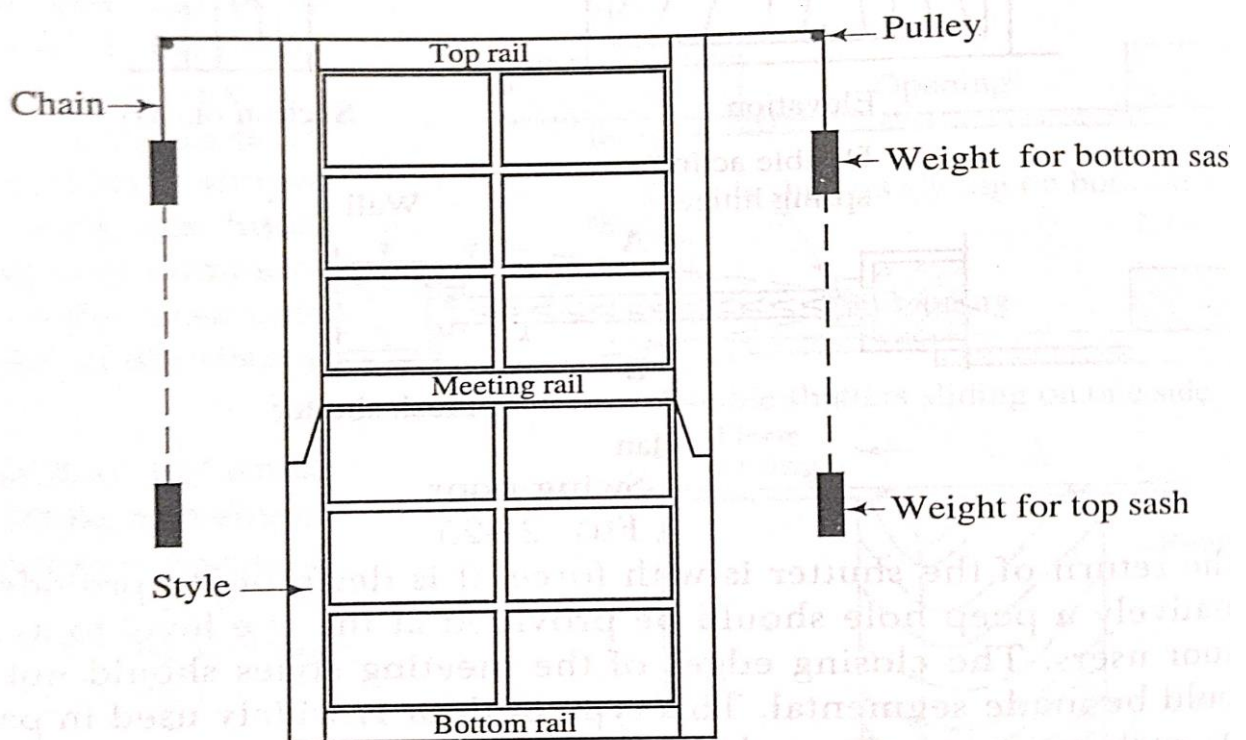
## EXPERIMENT NO. 4

### 1. AIM: Draw sketches of different types of doors and windows.



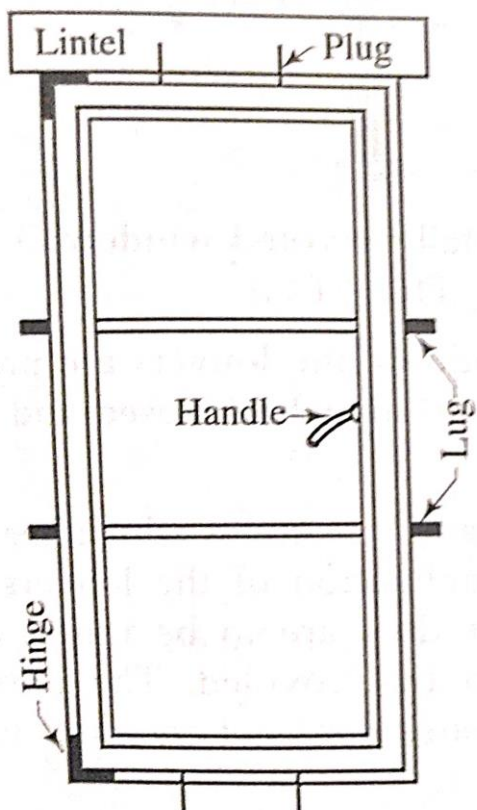


Double-leafed door with six panels

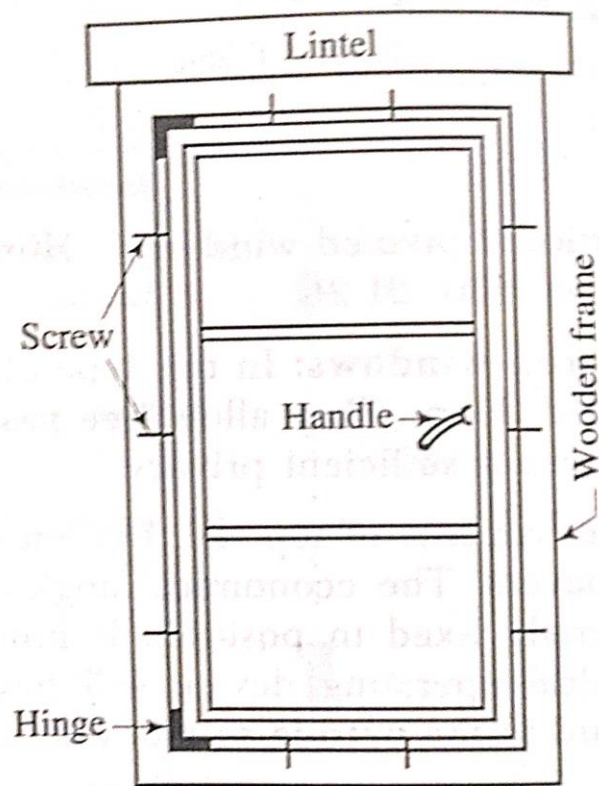


Double-hung window





Metal window fixed  
to the wall

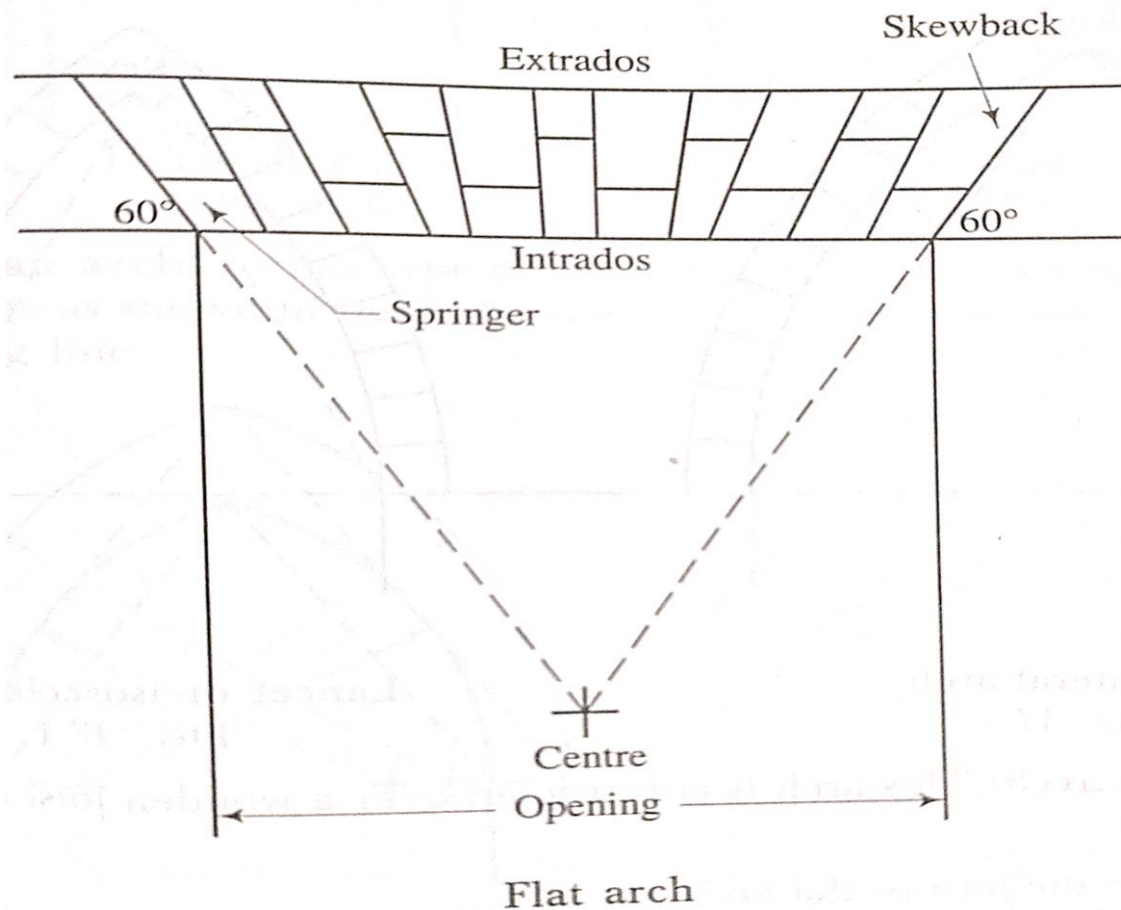
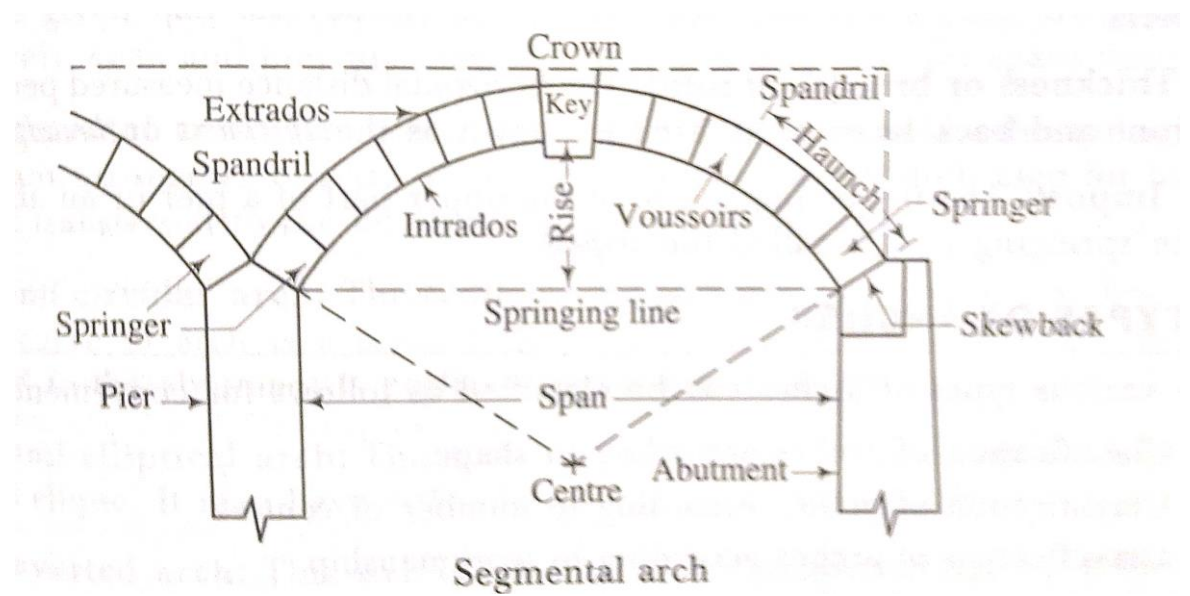


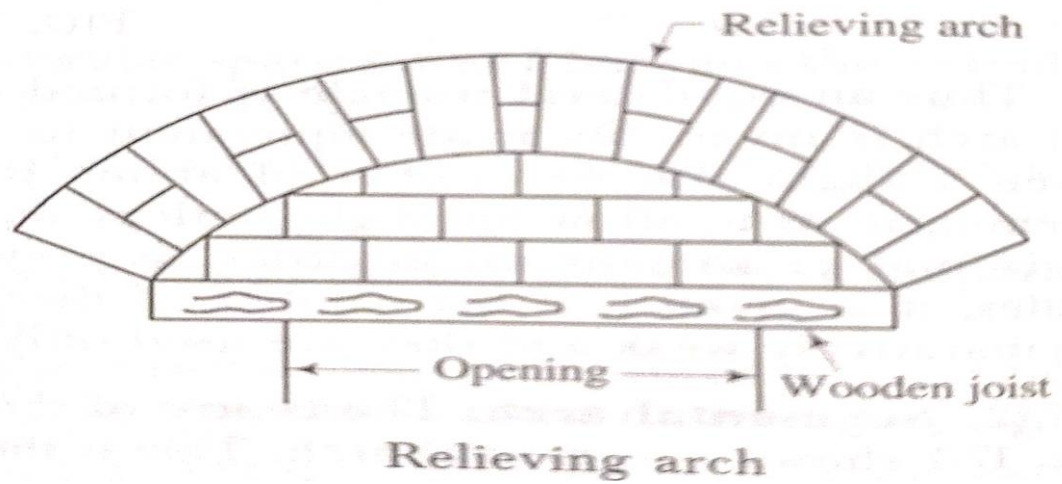
Metal window fixed  
on a wooden frame

## EXPERIMENT NO. 5

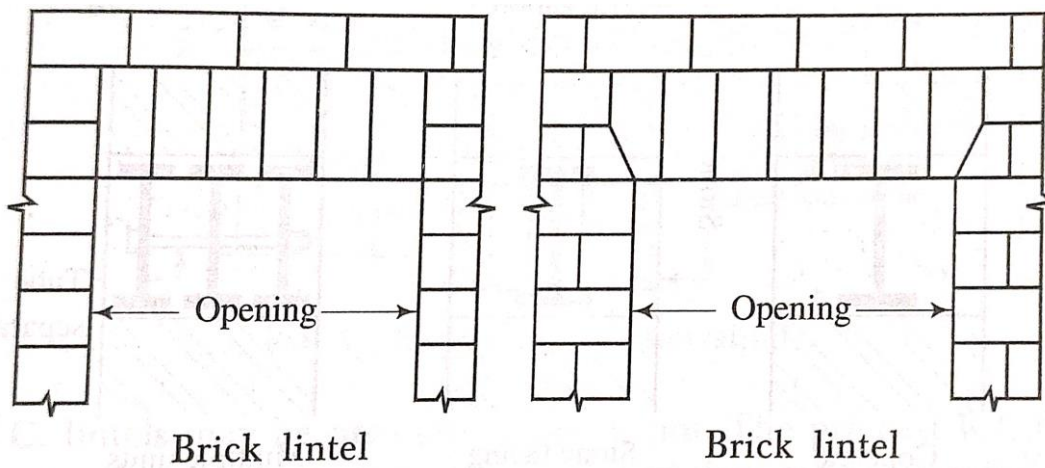
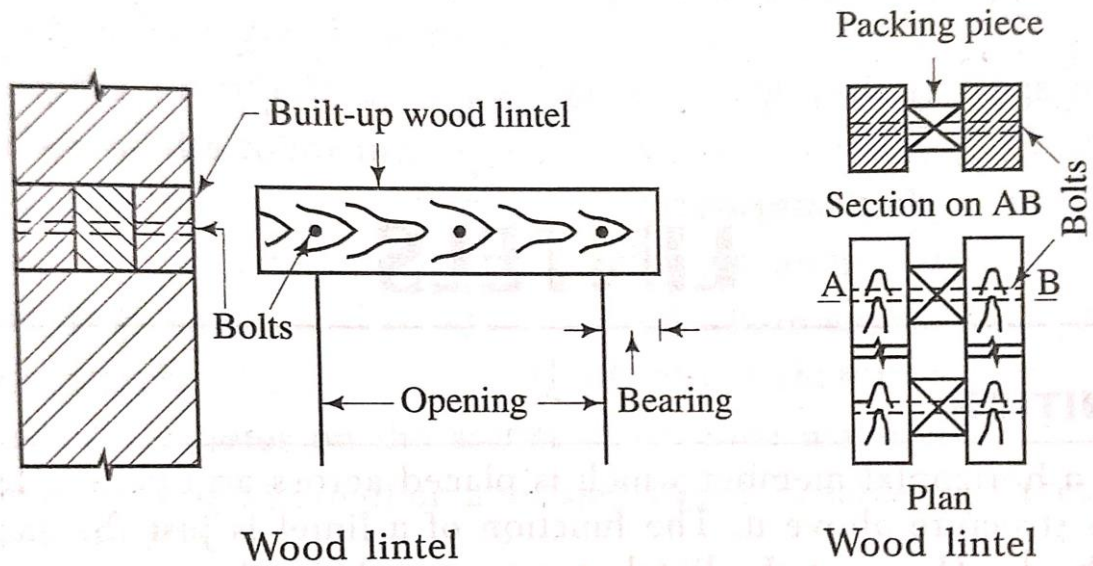
AIM : Draw sketches of different types of arches and lintels.

### ARCH





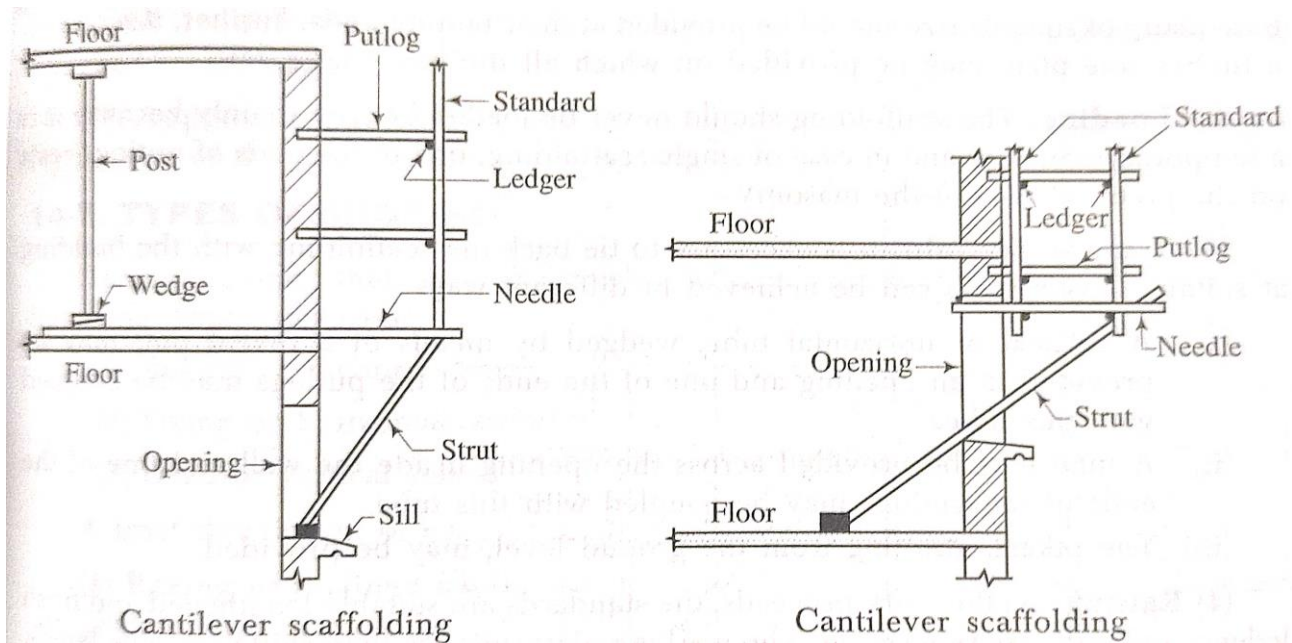
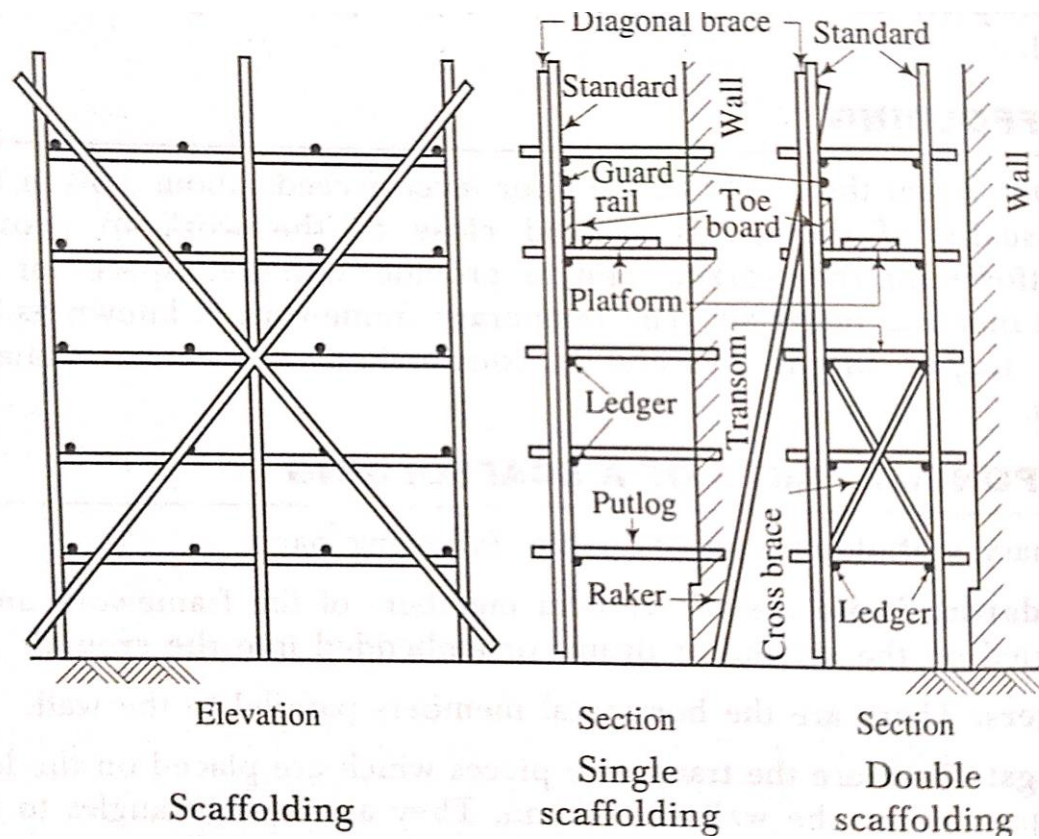
## LINTEL





## EXPERIMENT NO. 6

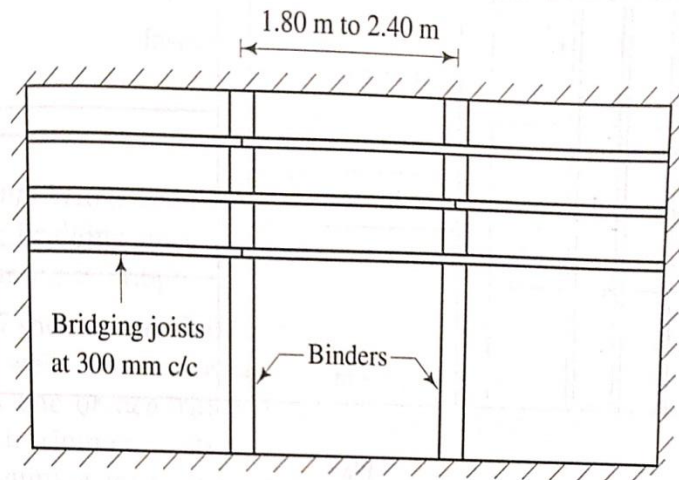
AIM: Draw sketches of various types of scaffolding.





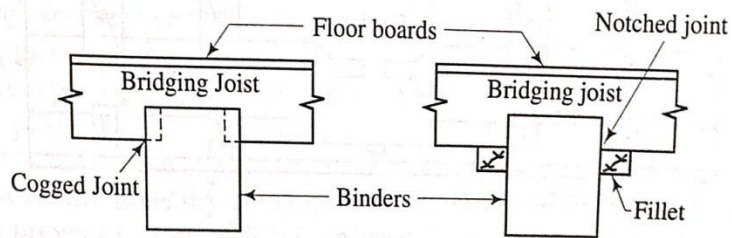
## EXPERIMENT NO. 7

AIM: Draw sketches of various types of floors.

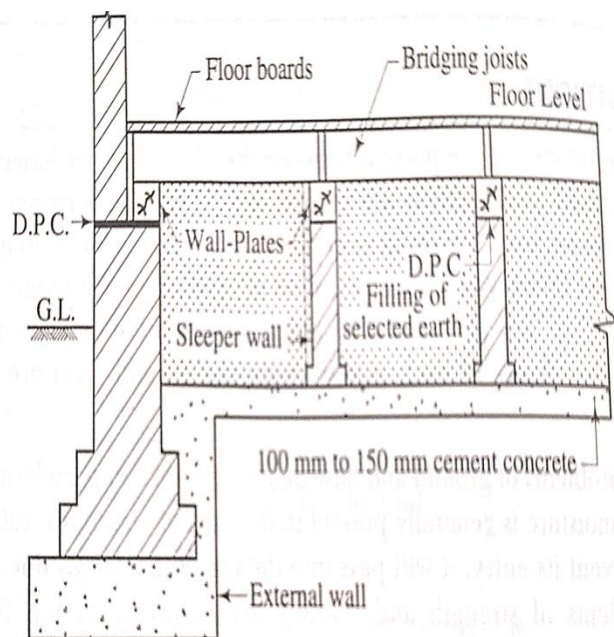


Plan of double joist timber floor

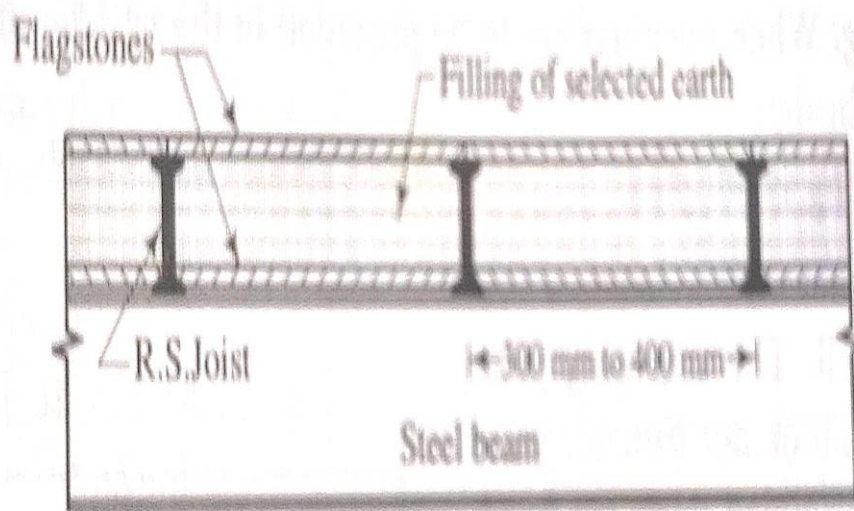
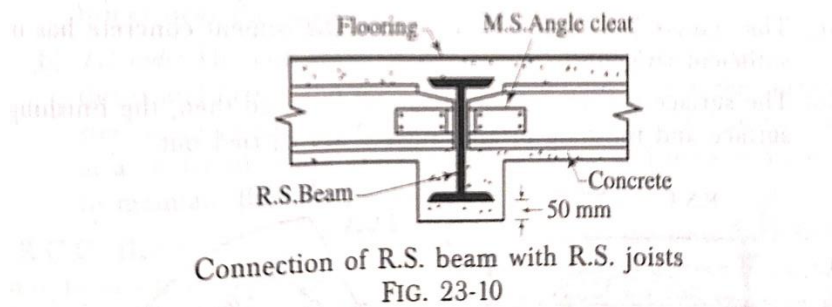
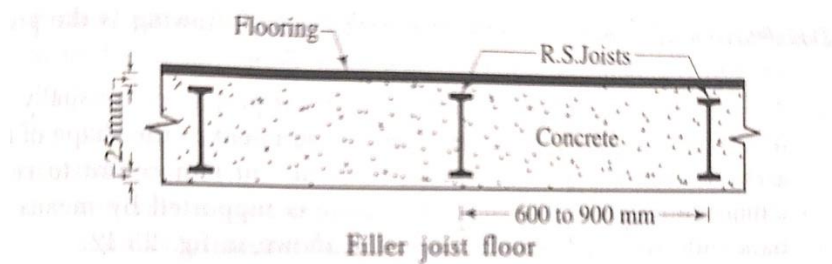
FIG. 23-3



Methods of fixing binders with joists



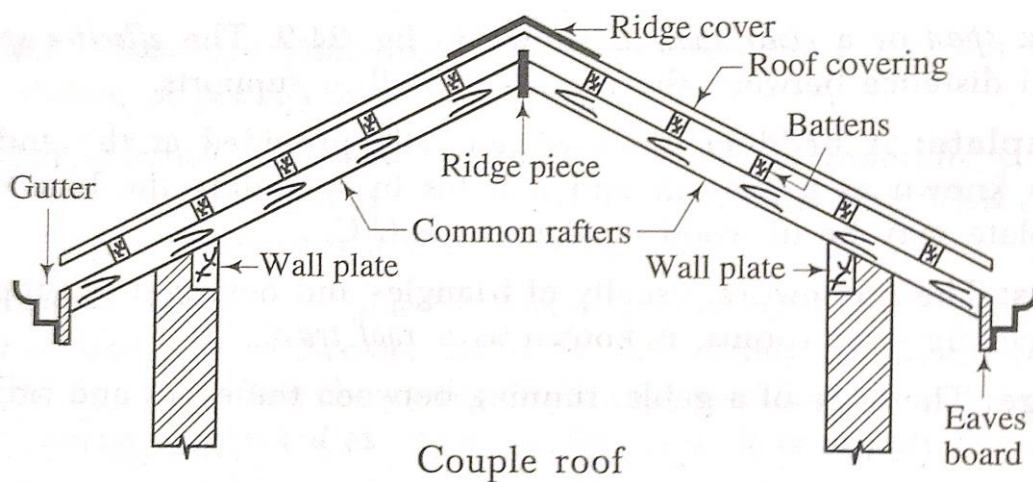
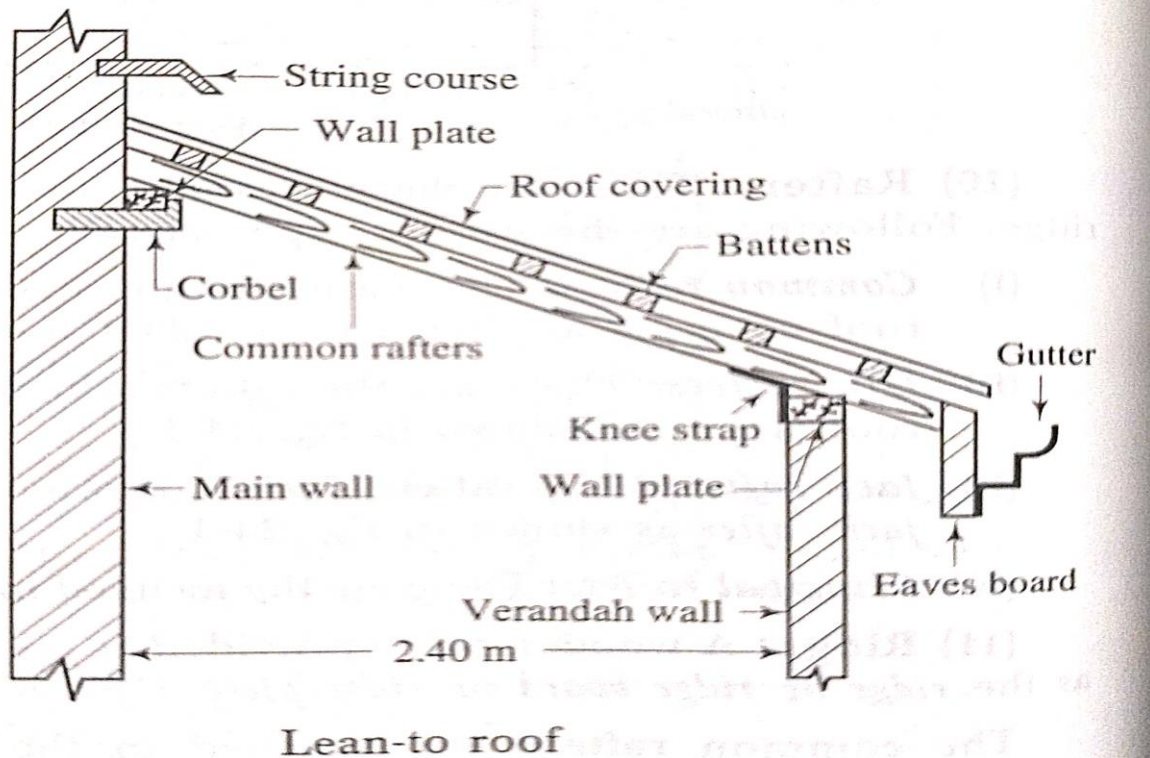
Basement or ground floor of timber

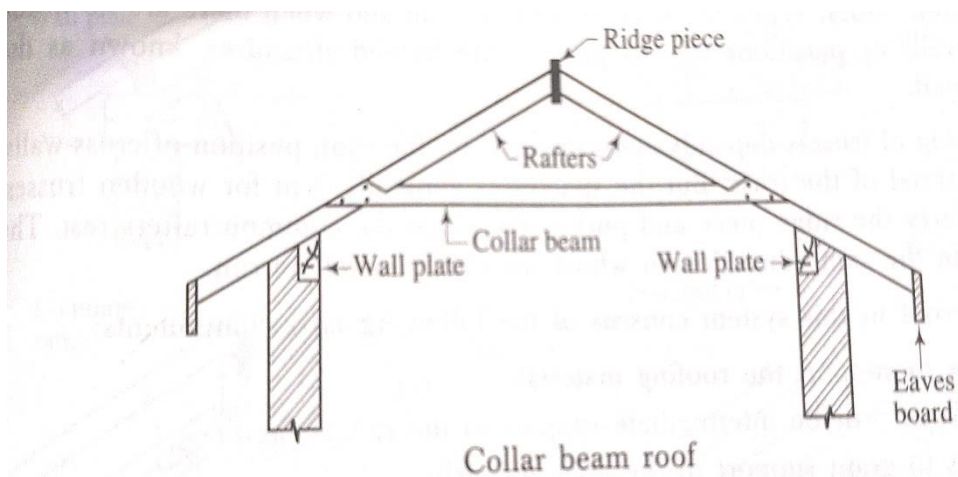
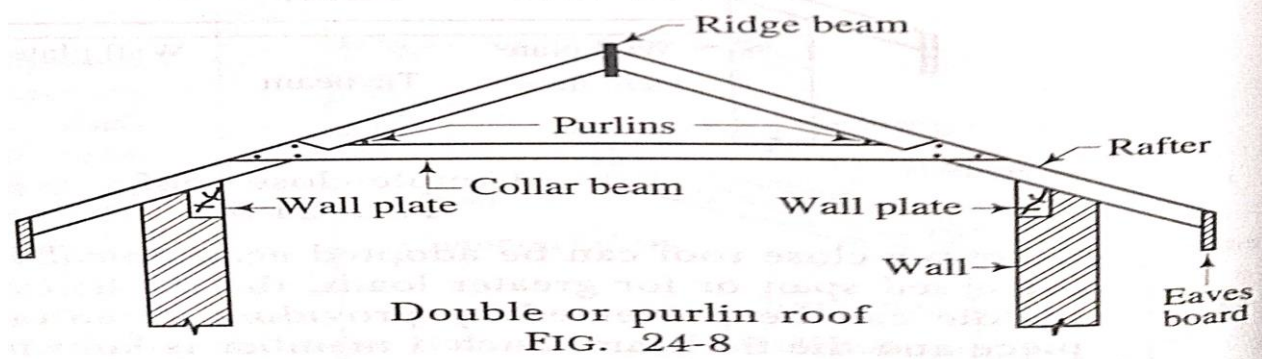
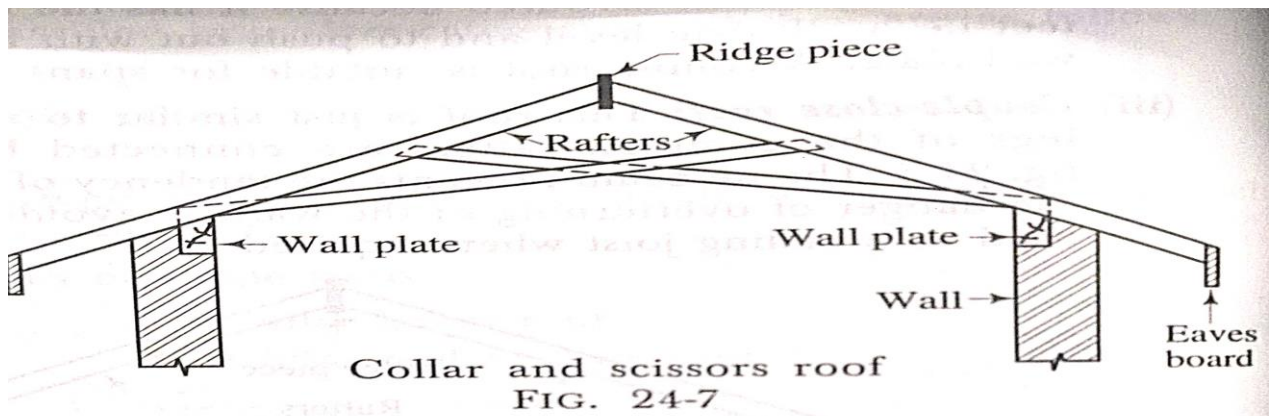


Double flagstone floor

## EXPERIMENT NO. 8

AIM: Draw sketches of various types of roofs.







## EXPERIMENT NO. 9

AIM: Draw sketches of various types of stairs.

