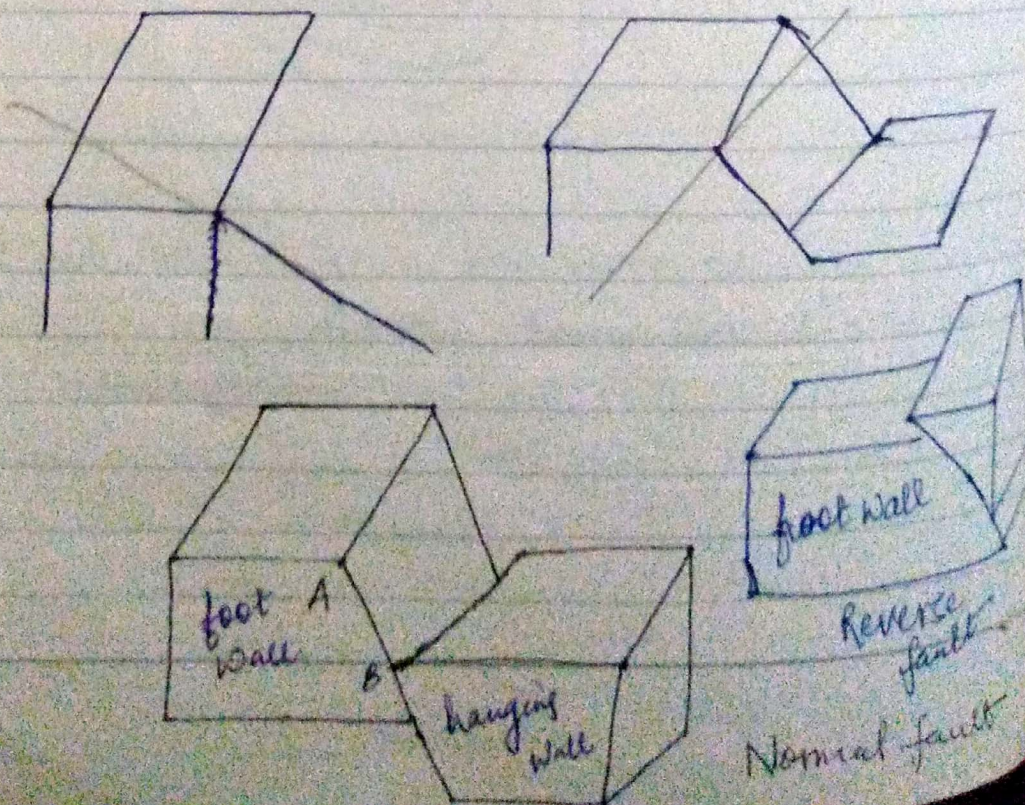


# Fault :- (FAULT)

## Classification of Fault :

1. On the basis of the apparent movement
- a) Normal Fault :- In normal fault, the hanging wall moves downward with respect to the foot wall.
- There are 4 possibilities
- (i) Foot wall remaining stationary and the hanging wall moving downward.
  - (ii) Hanging wall remaining stationary, the foot wall moves upward.
  - (iii) Both the walls move downwards but the downward movement of the hanging wall is more.
  - (iv) Both the walls move upward but upward movement of the foot wall is more than the hanging wall.



(D) Reverse Fault :- The hanging wall with respect to foot wall move upward. There are 4 possibilities

- (i) Foot wall remaining stationary and hanging wall moving upward.
- (ii) Hanging wall remain stationary, the foot wall moves downward.
- (iii) Both the wall move downwards but the downward movement of the foot wall is more.
- (iv) Both the wall move upward but the upward movement of the hanging wall is more than foot wall.

2. On the basis of Rake of Net Slip :-

a) Dip Slip Fault :-

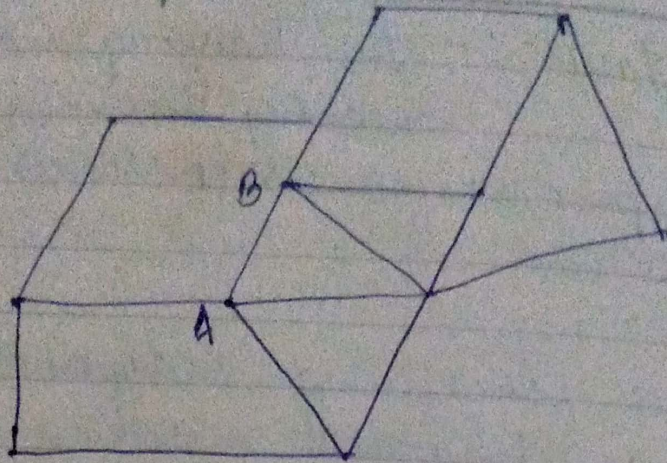
$$\text{Dip Slip} = AB$$

$$\text{Strike Slip} = 0$$

$$\text{Net Slip} = \text{Dip Slip} + \text{Strike Slip}$$
$$AB = AB + 0$$

In dip slip fault the net slip is along the direction of dip i.e., there is no strike slip component.  
i.e. Net slip = dip slip.

## B Strike Slip Fault :-

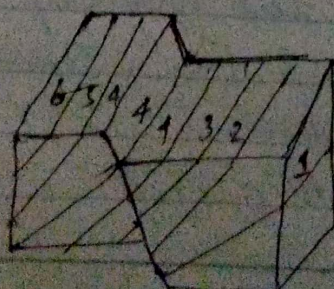
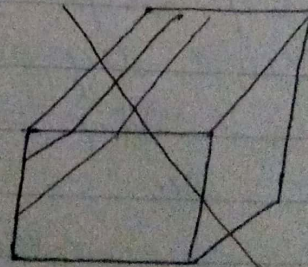
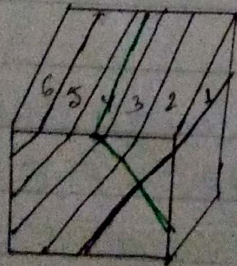


The net slip is along direction of strike and there is no movement along dip.

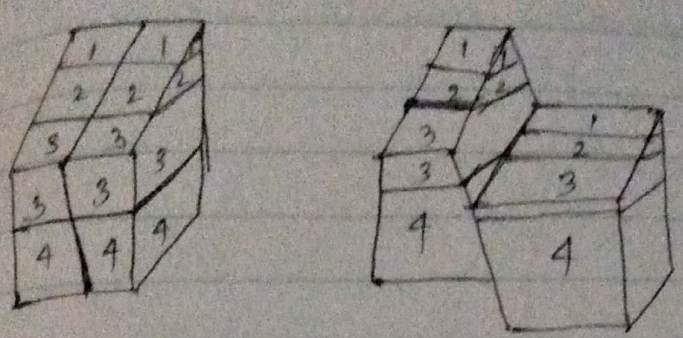
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3. On the basis of the attitude of Beds and Fault plane :-

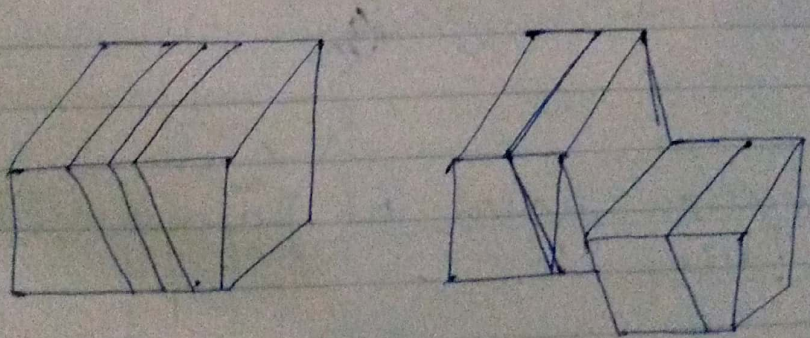
(i) Strike fault :- The strike fault are those which strikes parallel to the strike of bed.



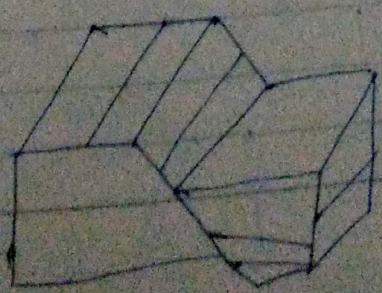
Dip fault :- Are those which are perpendicular to the strike of the bed.



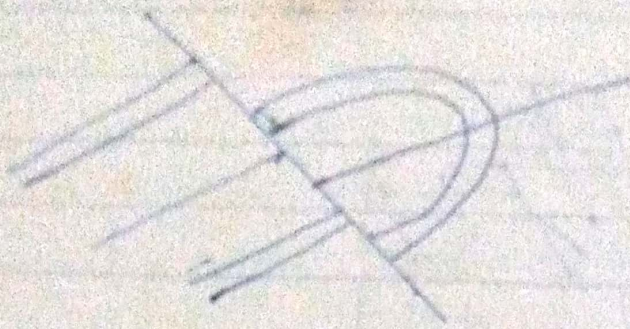
(iii) Bedding Fault : The bedding fault is a variety of a strike fault in bedding fault, the fault plane and the bed dip in same direction.



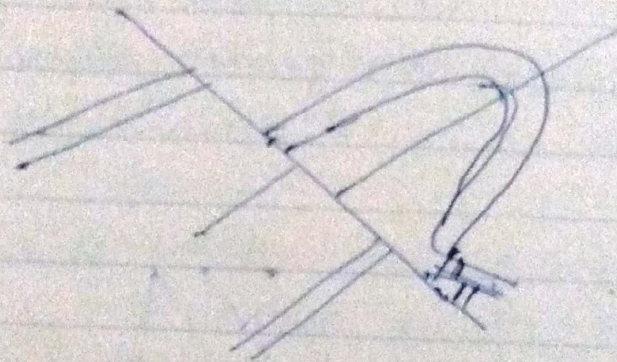
(iv) Diagonal Fault : The strike of the bed is obtained oblique to the strike direction of the fault.



(v) Longitudinal fault :-

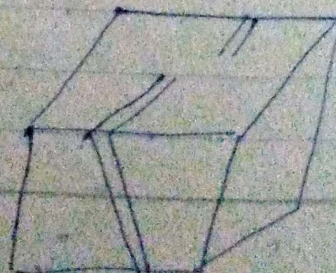
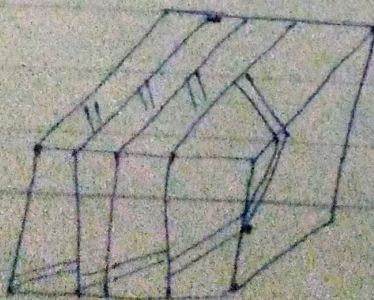


Transverse

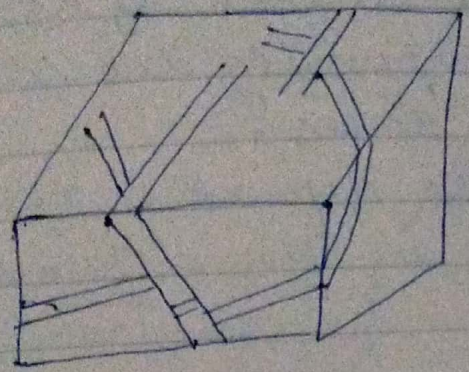


3. Classification based on fault Pattern :-

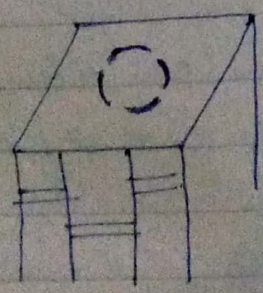
(i) Parallel Fault :- In parallel fault the fault plains of a multiple fault pattern are parallel to each other.



(ii) Enechelon Fault :- These are relatively  
 similar fault but their  
 Orientation appears to be somewhat  
 identical to the parallel fault.



(iii) Peripheral Fault / Arcuate Fault →  
 These fault are arcuate in  
 shape and it appears that the one  
 fault is concentric to another.



(iv) Radiating fault :- The radiating fault  
 appears to radiate from  
 a point. In fact there are multiple fault  
 whose fault plain are not parallel.

