**MASS WASTING**

1. a)

* Amount of precipitation and extent of saturation.
* The gradient of the slope
* Human activities such as mining.
* Occurrence of earthquakes and faulting

b) i) Rock fall

 ii) P-cliff face/steep slope/scarp slope

 q-Talus/rock debris/boulders

2.

* Due to temperature changes soil particles expand and contract hence shift position down slope.
* Moisture/rain water cause soil to become wet and compact. On drying the particles loosen and shift position down slope.
* Moisture acts as lubricant to soil particles causing their movement down slope.
* Removal of soil on the downhill side makes the rest of soil to shift down slope.
* Human activities/action of borrowing animals may cause the removal of soil on lower part of slope. This triggers soil particles on the upper part of the slope to shift down slope.
* Freezing of soil water expands the space between soil particles. Once water thaws particles fall by gravity shifting position down slope.
* External forces e.g moving a trigger effect which causes downwards movement of soil particles.

3.

* Soil creep pushes posts and fences from their original positions
* Displacement of soil particles down slope leaving steep upper slopes bare
* Burry roads and railways making repair expensive
* Causes slope retreat
* Leads to formation of terrace
* Leads to formation of terrace
* Leads to formation of deep fertile soils down slope which favours agriculture

4. **Mass wasting:**

This is the down slope movement of weathered materials under the influence of gravity.

**Mass movement**:

This is the down slope movement of weathered materials after lubrication by water.

5. **Soil creep:**

Movement of fine soil down a gentle slope. It is the slowest movement and quite hard to notice.

**Talus creep**:

Slow movement of angular waste of rock of various sizes down a cliff, hill, scarp and mountain side.

Solifluction: gravitational flow of surface materials saturated with water.

6.

* Very steep slope these accelerate the rate of movement.
* Very high rainfall which makes the materials to be extremely fluid and the ground to be generally unstable.
* Tectonic movement such as earthquakes and faulting.
* Human activities e.g mining or removal of soils at the base of slopes making the upper layers unstable.

7. **Evidence of soil creep includes**:

* Joint blocks of distinctive rocks types are dislodged from the outcrop
* Edges of strata seem to bend in the down hill direction.
* Fences posts and telephone poles lean downwards and even shift measurably out of line.
* Retaining walls of road cuts lead and break outward under pressure of soil creep from above.
* Accumulation of deep soil at the base of slopes while the upper slopes are left bare.
* Bare and exposed steep upper slopes due to soil displacement
* Slope retreat
* Bent tree trucks.