

EARTHQUAKE:

Introduction:

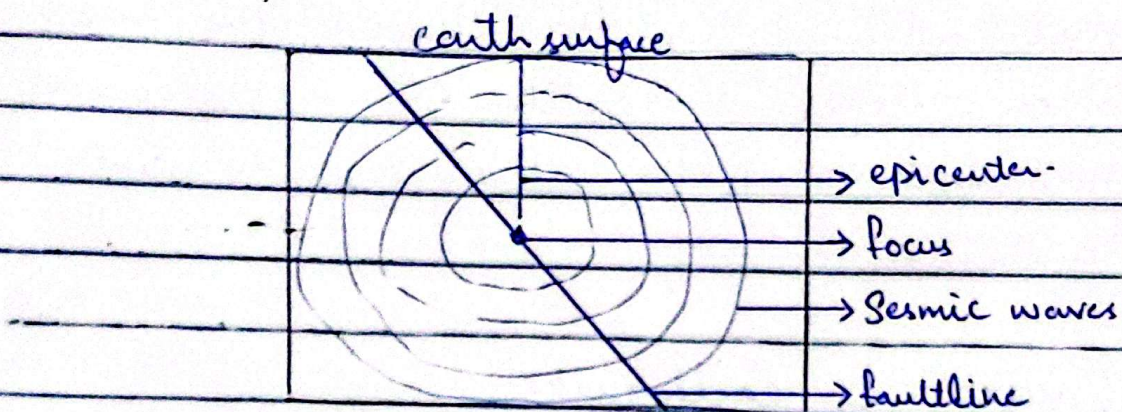
Earthquake is a natural disaster that occurs due to the movement of earth tectonic plates. It is measured by a scale called Richter scale. Usually earthquakes occur around the world, but most of them are too mild to be noticed. Whereas, earthquake with high magnitude can be very fatal and can destroy everything in seconds.

Key concepts of earthquake:

- 1) Epicenter: The point at the surface of earth above the focus.
- 2) Plates: Massive rocks that make up the outer layer of earth surface.
- 3) Fault: Over time, the movement of tectonic plates have created center weak points.
- 4) Seismic waves: When faultline moves

between two blocks, it produce vibrations called seismic waves.

5) Focus: The point within earth where an earthquake rupture starts.



↳ A sketch showing the rupture of an earthquake from focus.

Types based on depth of focus:

A) Shallow focus:

It is also called "crustal earthquake", caused by faults movements of continental plates. It has their focus nearer to earth surface and cause greater damage. They are more frequent, but ~~are~~ mostly very minute to notice.

B) Deep focus:

It is also called "intra plate" earthquake that occurs within subducting oceanic plates beneath the continental plates. Their focus are much deeper in earth. It occurs when two tectonic plates slide towards one another.

Causes of earthquake:

↳ Elastic Rebound Theory:

In 1906, Henry Reid presented this theory. It states that "if a rubber band is stretched and broken, elastic energy stored in the rubber will suddenly released. Similarly, the crust store elastic energy which is released suddenly during an earthquake. So, most of earthquake are the result of this store energy."

↳ Tectonic Plates movement:

The crust is not uniform. It is made up of huge blocks that fit together. These blocks are called tectonic plates. Due to the movement of these plates, earthquake is produced. The greatest intensity of earthquake is found along plate boundaries.

Summary:

Earthquake is a disaster happens due to the movement of tectonic plates. It is produce in the form of seismic waves, produce at the faultline and spread in all direction. It has either a deeper or shallow focus in earth. The shallow focused earthquake are very fatal. The recent earthquake in Afghanistan was a shallow focus that has damaged the country badly.