

A natural disaster is a sudden, violent and destructive event caused by natural phenomenon

PHYSICAL SCIENCES

Disaster Risk Management

Urban fire

NATURAL HAZARDS AND DISASTERS

Earthquake

Tsunami

Avalanche

Drought

wild fire

volcanic eruption

floods

Traveling cyclone

- Traveling cyclone
- Tropical cyclone
- Middle Latitude cyclone
- Torbadoes

1- EARTHQUAKE:

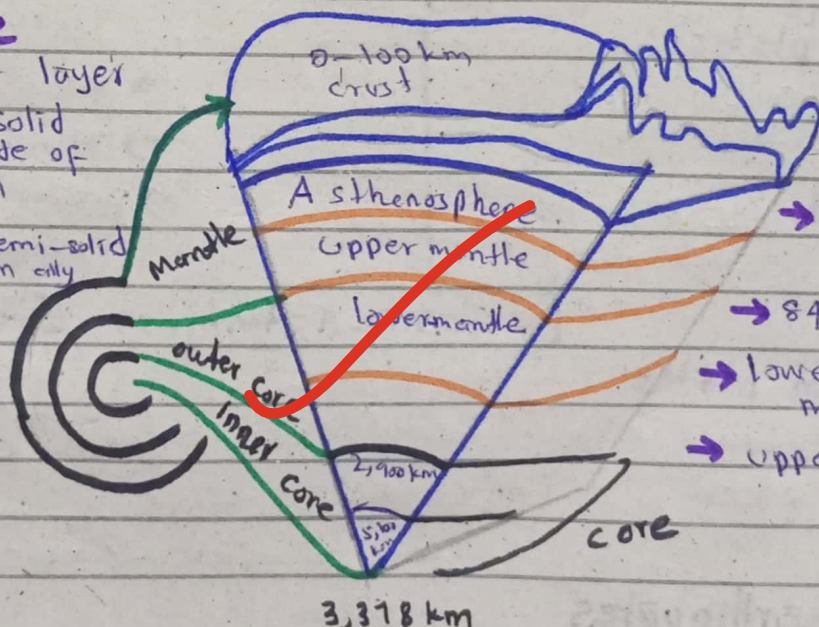
Result of sudden movement along faults within earth.

To understand the concept of Earthquake, structure of earth should be understood.

Structure of Earth:-

The Core

- Central most layer
- Inner core → solid and made of iron
- outer core → semi-solid nickel and iron only



The Mantle

- 2890 km
- silicate rock b/w crust and core.
- 84% of earth's volume
- lower part of mantle → magma
- upper part → solid

The Crust:

- Rocky layer - outermost solid shell.
- No fairly uniform crust - (continental crust + oceanic crust)
- crust + mantle = Lithosphere.

Key Concepts of Earthquakes

Faults: A fracture in the rocks, that makes the earth crust.

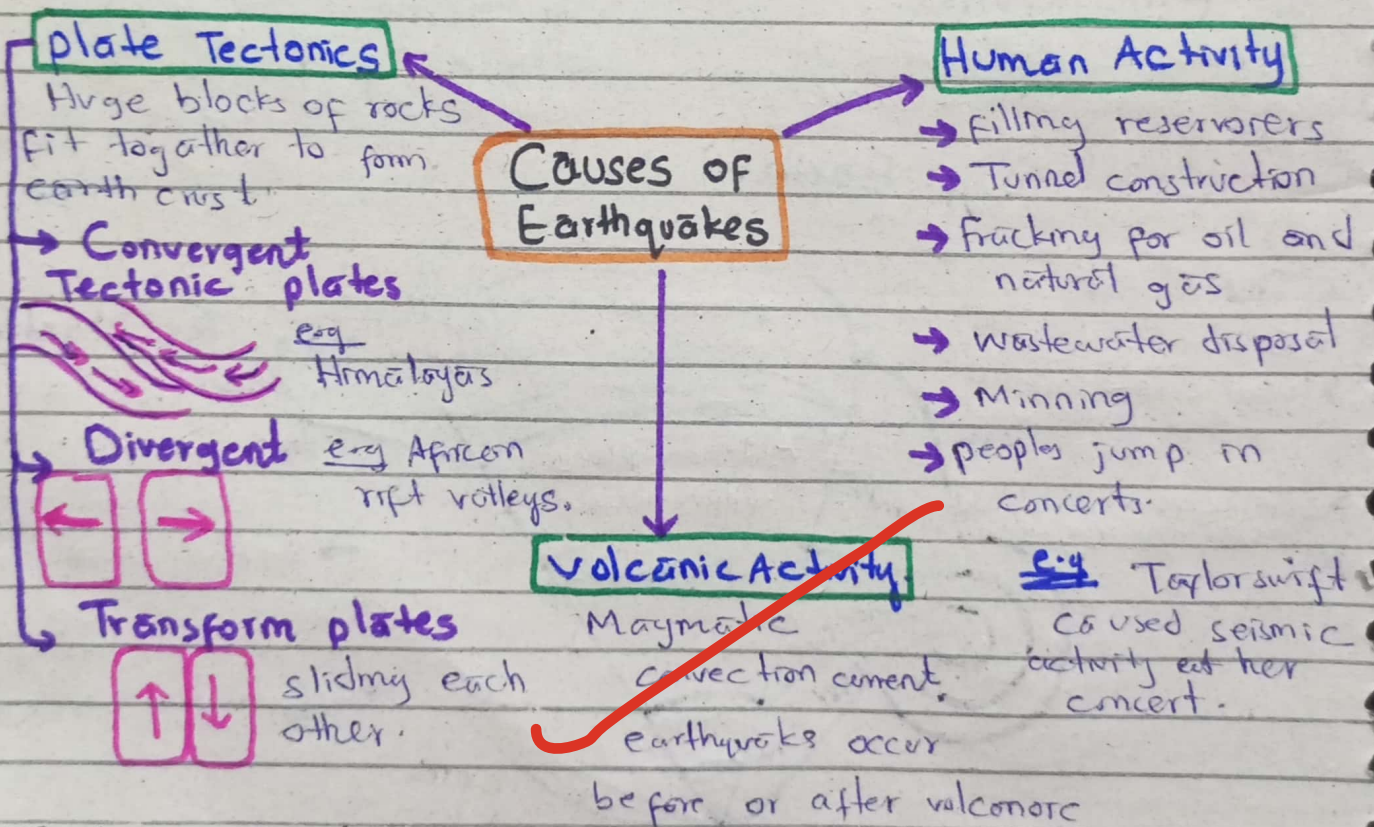
plates: Massive layer of rocks that makes the outer layer.

Hypocenter: Location below the earth crust, where earthquake start.

Epicenter: Location directly above it, on the surface of earth.

Main shock: The largest main earthquake.

Earthquakes occur when the earth's crust releases energy suddenly - (seismic waves).



effects of Earthquakes

Ground shaking, Building damage, Fires, Flooding, Landsliding, Tsunamis, mental health, Economic impacts

underground nuclear explosions.

How Earthquakes are Recorded?

Earthquakes are recorded using seismographs.

Recording created by seismographs is called seismogram.

How to Reduce Impacts of Earthquakes

(prepare your home, educate yourself and develop an emergency plan).

→ Base-Isolation techniques

→ Designing earthquake-resistant structure

Largest Earthquakes History in Pakistan.

2005 - Kashmir earthquake: 8 - October - 2005
7.6 magnitude

Death: 73,276 — 87,350.

1935 - Quetta Earthquake: 31 May 1935 — magnitude = 7.7

Death — 30,000 — 60,000

attempt and upload proper questions for evaluation; not notes.