



Tectonic plates

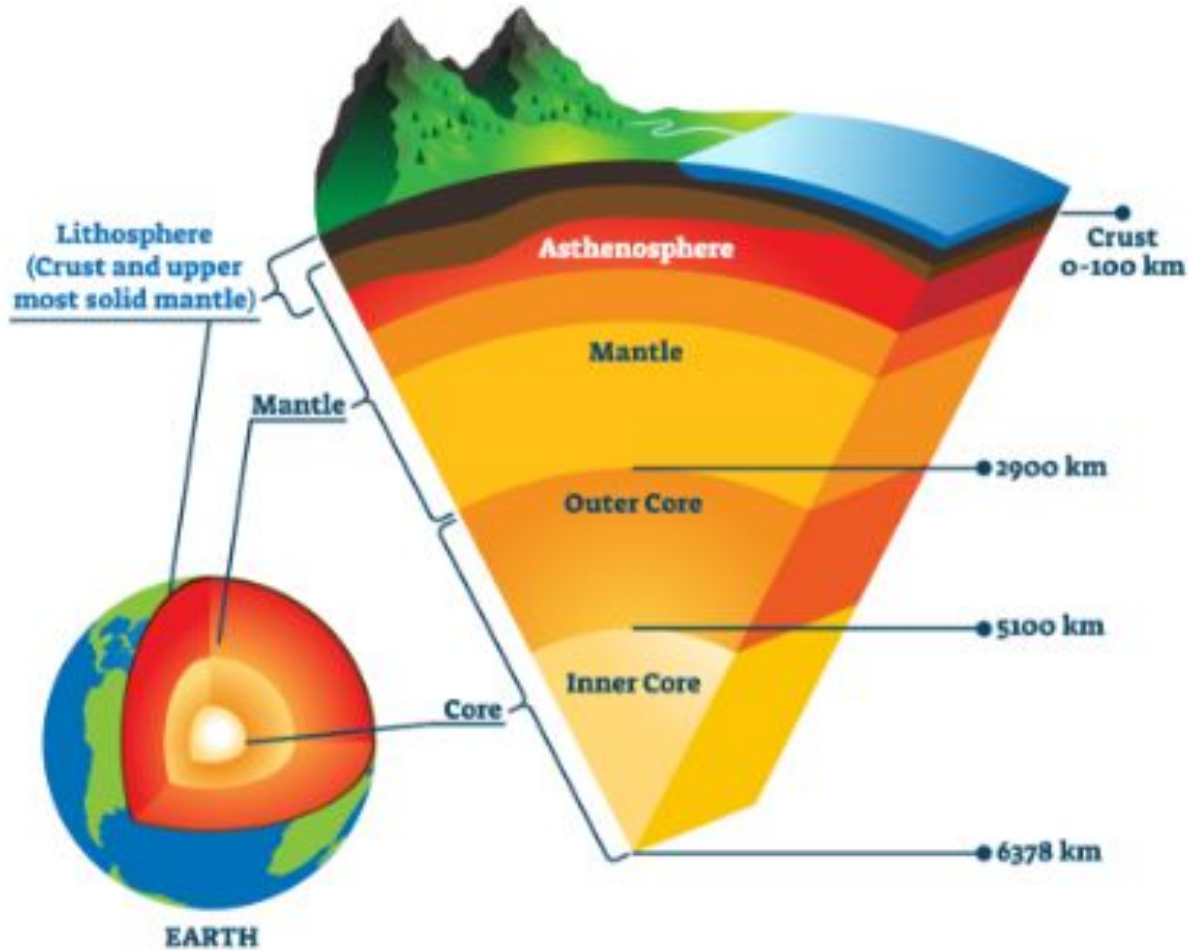
Earthquakes

The earth's surface is made of tectonic plates which are constantly moving either towards each other or away.

Pakistan lies on convergence of the eurasian , arabian and indian plate making it the centre of the earthquakes.

This resulted in the formation of the mountain of sulaiman range

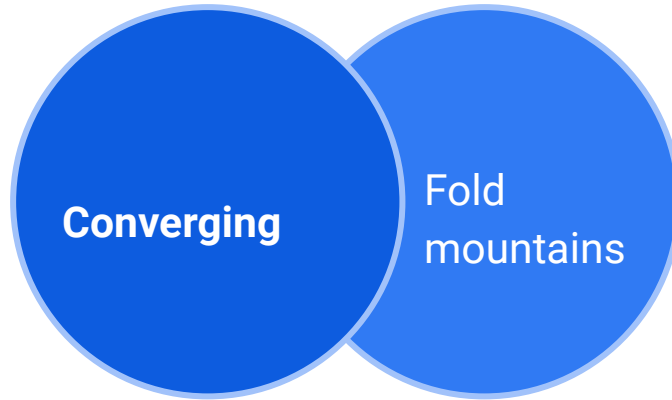
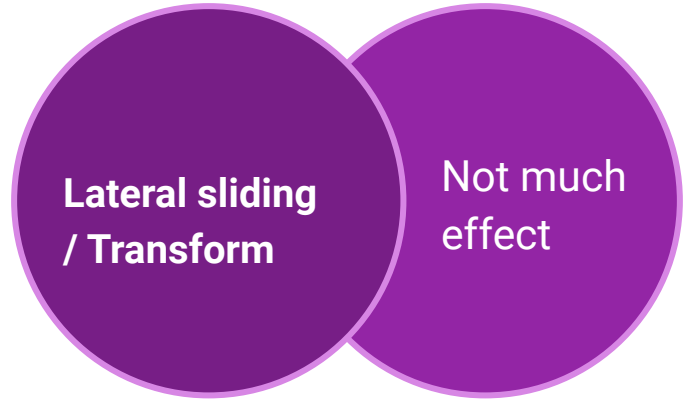
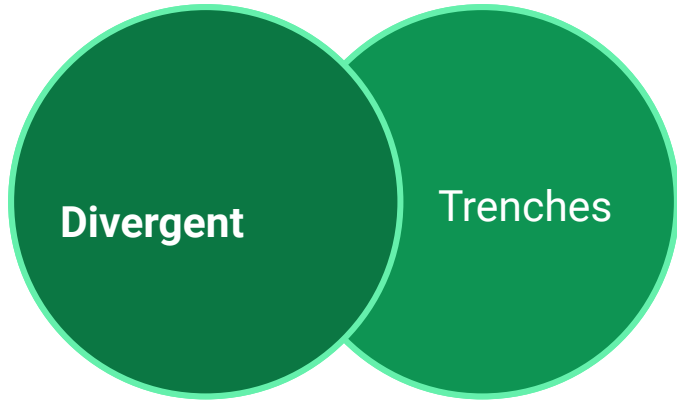




The tectonic plates are part of the hard rigid lithosphere which consists of the earth's crust and upper solid mantle .

Ways of plate movement





Fold mountains



HIMALAYAS

Sulaiman range is also an example of Fold mountain

The **Himalayan mountain range** and Tibetan plateau have formed as a result of the collision between the Indian Plate and Eurasian Plate





Trenches

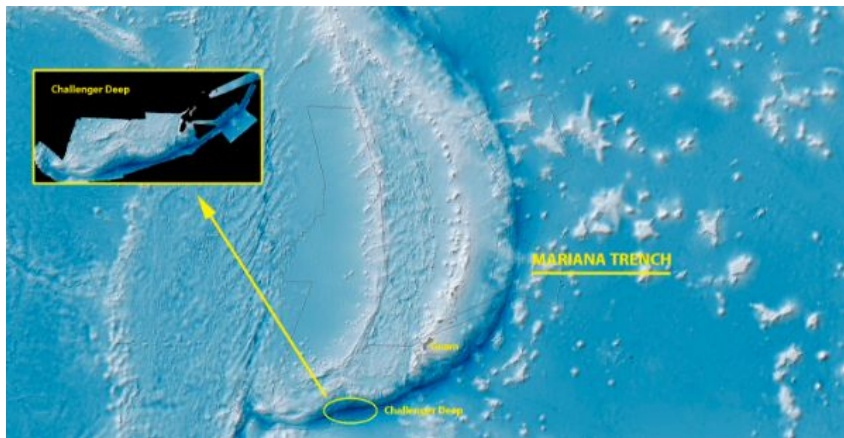
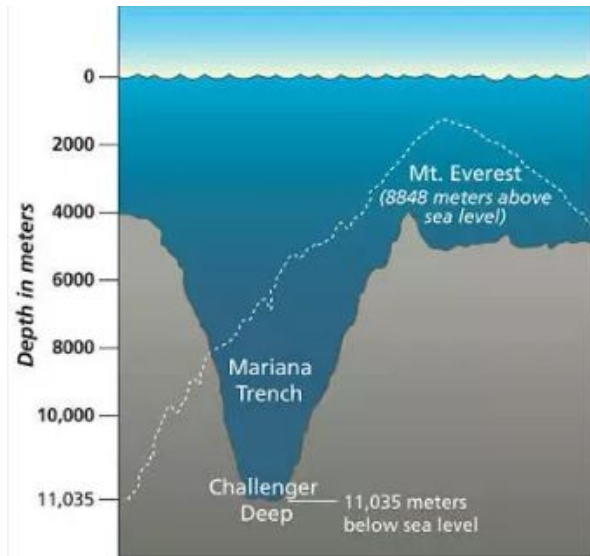
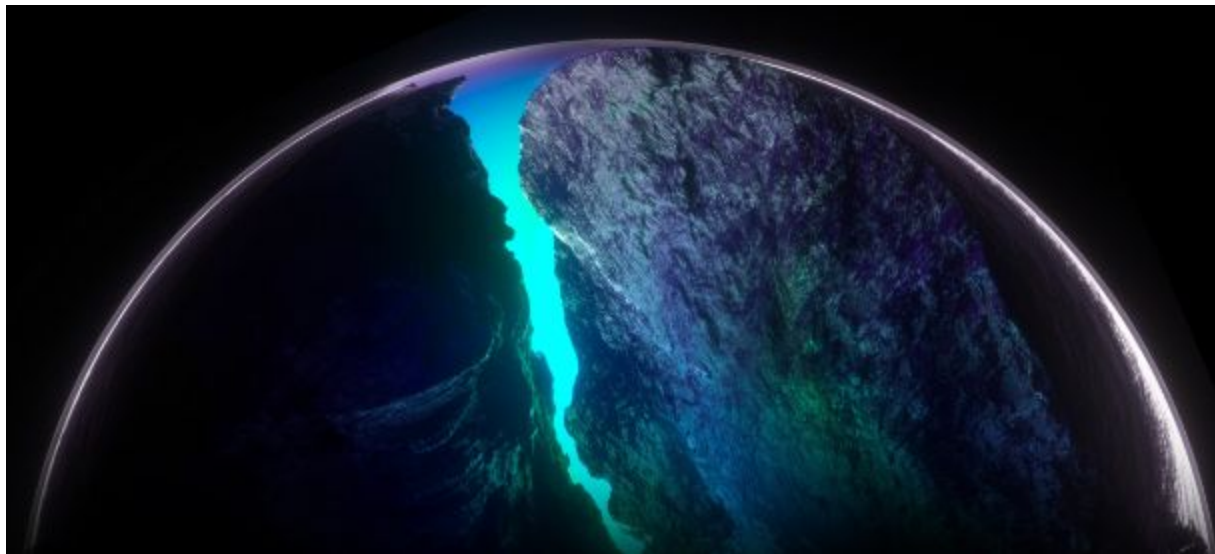
Trenches formation

The trenches are formed either on land or underwater due to the movement of tectonic plates away from each other

Known as
Divergent layer

Example
The mariana trench





Effects of earthquakes

1. Landslides occur due to earthquakes
2. Tsunamis or large coastal waves are also formed which may also result in floods
3. Damage to roads and infrastructure
4. Loss of lives
5. Contamination of water supplies and hence causing diseases
6. Fire due to breakage of electricity lines
7. Blockage of roads and no communication prevents the medical aids and rescue

Earthquakes in pakistan

2005

AZAD KASHMIR AND
BALAKOT

86,000 deaths and
75,000 injuries



7.6 magnitude

Extreme damage in Azad Kashmir, Balakot town almost completely destroyed and Muzaffarabad suffering heaviest number of casualties. Deadliest earthquake in South Asia, epicentre centred on the Jhelum Fault Zone

**2008 &
2013**

BALUCHISTAN

300-500 deaths in 2008

800 deaths in 2013



6.4 - 7.7 magnitude

Chaman fault line in
Balochistan had to bear the
effects and aftershocks of the
earthquake

2015

BADAKHSHAN

400 deaths and 2000
injuries

7.5 magnitude



Date ↕	Locality, district, or province ↕	Mag. ↕	MMI ↕	Deaths ↕	Injuries ↕	Notes ↕
2023-03-21	Badakhshan, Afghanistan	6.5 M _w	V	20	302	Severe damage, ten killed in Afghanistan. Damage to buildings also in India and Tajikistan
2022-06-24	Khyber Pakhtunkhwa	4.2 M _w	VII			Five killed in Afghanistan
2022-06-21	Pakistan-Afghanistan Border, Khost Province, Afghanistan	6.0 M _w	VIII	13	27	Heavy damage. Over 1,100 killed in Afghanistan.
2022-05-06	Khuzdar, Balochistan	5.2 M _w	VI		1	Moderate damage
2022-03-16	Gilgit-Baltistan	5.1 M _w	VII	1	9	Minor damage
2021-12-27	Gilgit-Baltistan	5.2 M _w	V		9	Severe damage
2021-10-07	Harnai, Balochistan	5.9 M _w	VII	42	300	Severe damage
2019-10-06	New Mirpur, Azad Kashmir	3.6 M _w	IV	1	10	Casualties due to a house collapse
2019-09-24	New Mirpur, Azad Kashmir	5.6 M _w	VII	40	852	Severe

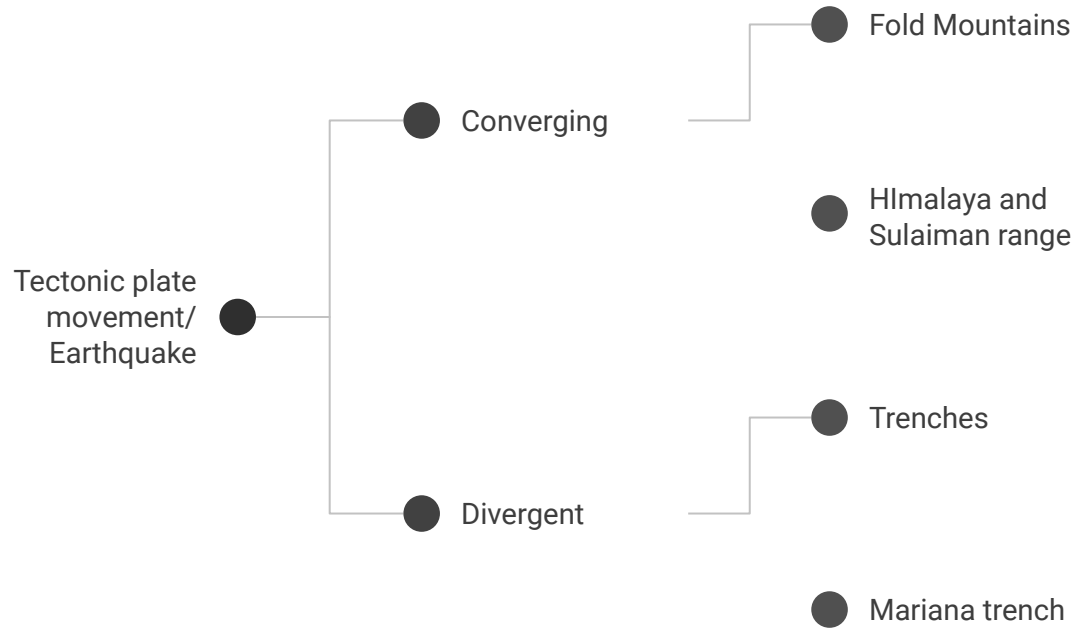
Response by international and local organisations

Relevant points that support the statement may include:

- Organisations such as the International Rescue Committee are based in Pakistan and have extensive experience of responding to events in Pakistan. Therefore, the organisation was able to make a rapid and significant contribution in 2005 when a powerful earthquake affected northern Pakistan. The organisation provided shelter, food, water, medical aid and counselling to thousands of survivors
- During the 2008 earthquake which affected Balochistan, international organisations such as the World Health Organisation sent medical aid and supplies for 50,000 people. This provided essential treatments for those injured and suffering from hyperthermia. During the 2013 Balochistan earthquake, international agencies made a more limited contribution to the relief effort, at least initially, as there was a significant army presence in the affected area.

Relevant points to counter the statement might include:

- In 2005, the government rapidly deployed the Pakistani army ensuring humanitarian aid reached isolated communities and to co-ordinate relief supplies. The Pakistani government and army were therefore an essential part of the aid effort.
- Much of the relief operations were Pakistani lead, with organisations such as NATO working with the Pakistani army and other groups. For example, NATO engineers worked with the Pakistani army on project Winter Race in 2005 to provide winter shelters for people living in the mountains. International organisations therefore depended on a partnership with the government/army to provide relief.
- A similar situation occurred in 2018 when the army played a significant part in co-ordinating relief. Following the 2008 earthquake event, a number of Pakistani Islamic groups such as the Jamaat-Ud-Dawa made small but significant contributions to the relief efforts and used local knowledge to reach locations which could not be accessed by international organisations.



- Floods

- Tsunami

- Volcanic eruption

- landslides

For more notes contact; 03232726755