

Q ① Mention the global Occurrence of Volcanic Eruption in 2021 & their impact on regional environment

At any given time nearly 20 volcanic eruptions are happening around the globe mainly due to the plate tectonic or the heat gradient formed due to the internal mechanisms of the Earth.

IT'S BETTER TO START DIRECTLY AS - 2021 has been noticed as one of the most volcanically active years.....

Origin of Volcanos

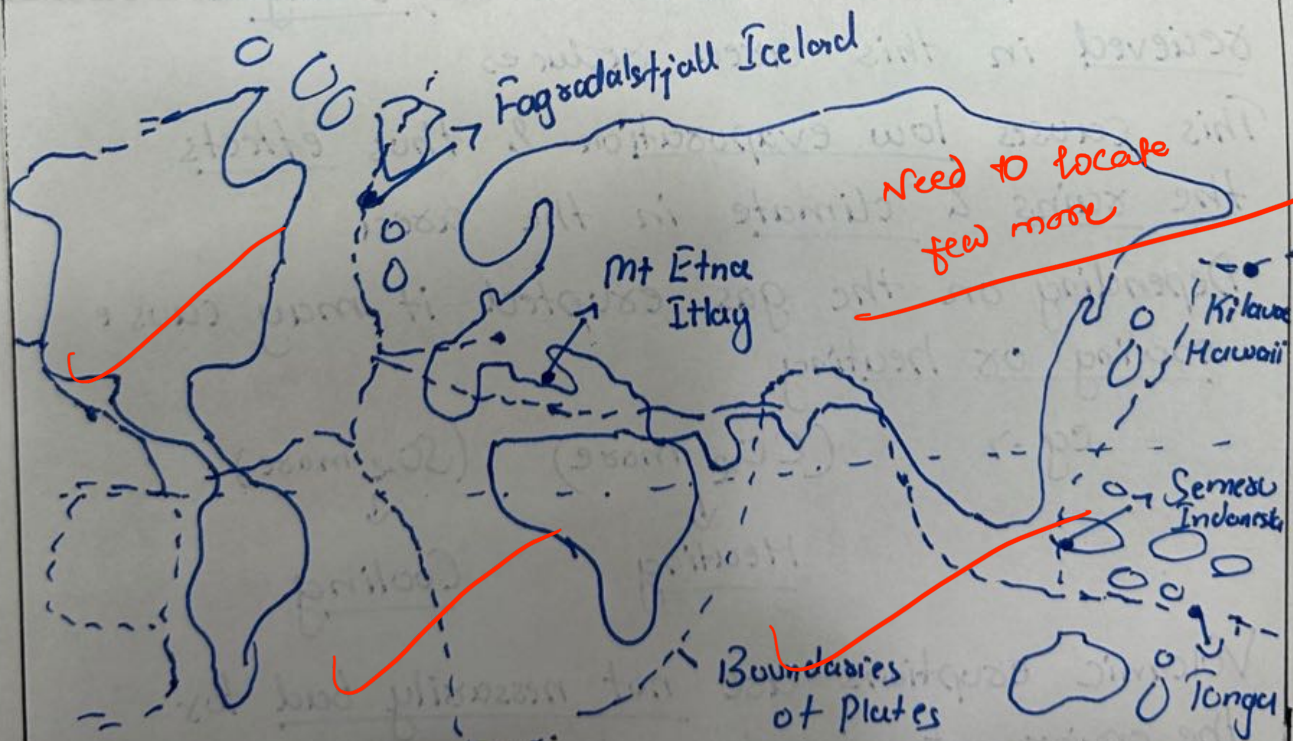
Divergent Plate boundaries

-> lava escapes through the fault created

Convergent Plate boundaries

-> Subduction of denser plate causes magma to erupt

NO NEED TO WRITE.



Volcanic Eruptions 2021

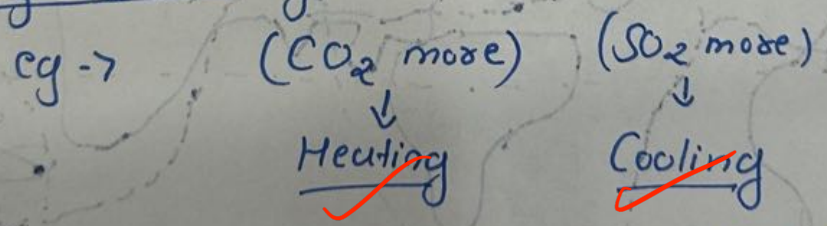
- 1 Major Volcanic Occurrence
- (i) Mt. Itra -> Italy (b/w Eurasian & African Plate)
 - (ii) Fagradalsjall -> Iceland (b/w Eurasian & North America Plate)
 - (iii) Semeru -> Indonesia (Pacific Ring of fire)
 - (iv) Kilausu -> Hawaii (Pacific Ring of fire)
 - (v) Tonga (Pacific Ring of fire)

-> As we can see that major eruptions happen at the points where plates coincide

Ecological Impacts → Though written Ecological but no visible point later!

- (1) Huge column of gas & ash gets suspended in Stratosphere
- (2) Due to suspension of ash & dust, sunlight decreased in this area reduces
- (3) This causes low evaporation & thus affects the rains & climate in the area
- (4) Depending on the gas erupted it may cause cooling or heating

- can categorise as impacts
- ① weather
 - ② precipitation
 - ③ Agriculture
 - ④ navigation
 - ⑤ human habitation
 - ⑥ env/pollution



Volcanic eruptions are not necessarily bad for the environment, in long term we can see many positives effects like fertile soil due to ash, earth cooling, new minerals etc. Volcanos are also source of temendous power if we are able to harness it will help humanity a lot.

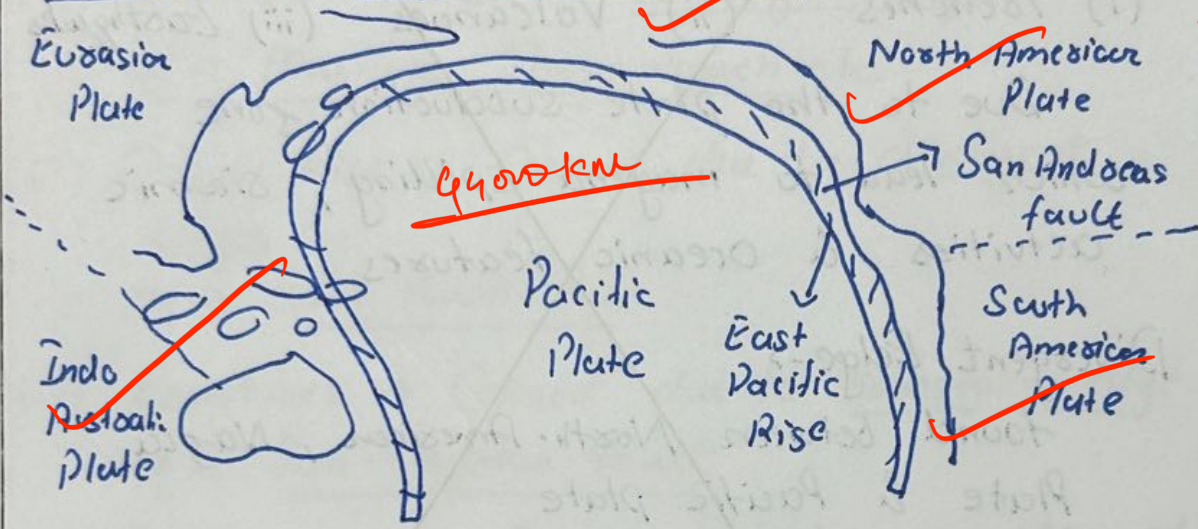
okay but can be better aligned

Q Discuss the geophysical characteristics of the Circum-Pacific zone.

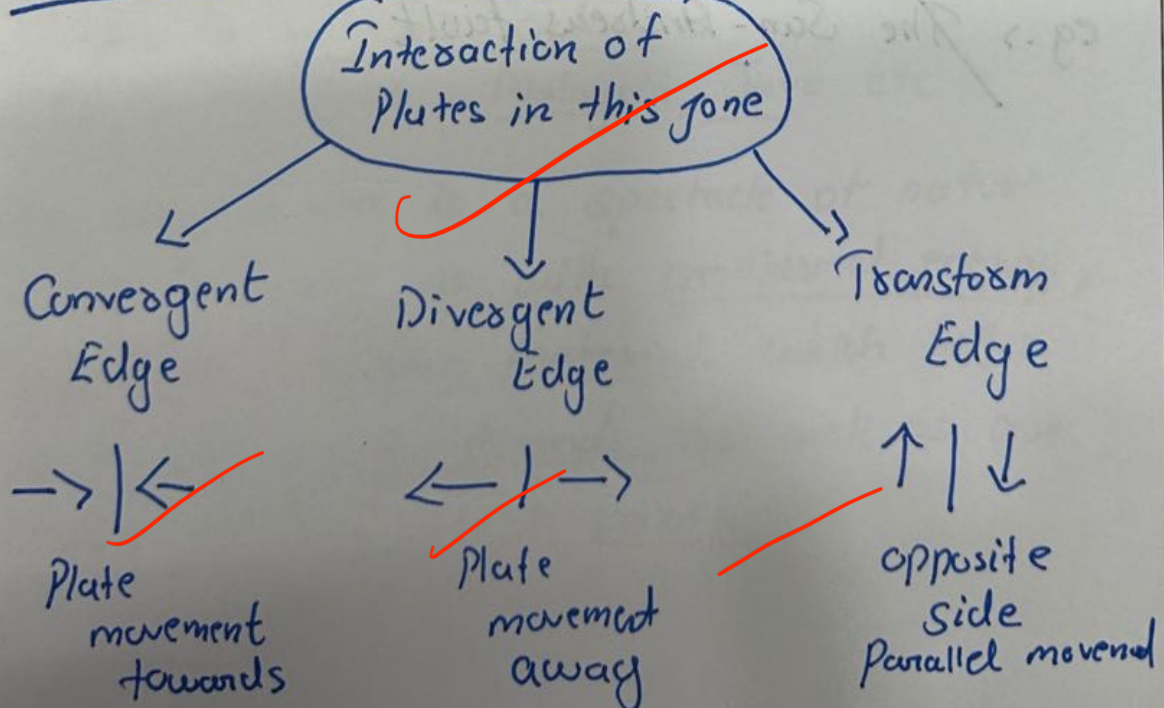
3

Circum-Pacific zone also known as the 'Ring of fire' describes a path along the Pacific Ocean characterised by active volcanoes & frequent earthquakes.

convergent boundary mainly



This zone lies on the periphery of the Pacific plate where one can find various plates interactions, which define the characteristics of this zone.



Features found in the Ring of Fire →

(4)

(i) Volcanoes → Found mainly at the convergent edges which are formed due to the subduction of plates

eg → Tonga, Philippines volcanoes etc → Good

(ii) Trenches → found at convergent edges

eg → Mariana, Tonga trench etc

(iii) Oceanic Rise → Caused due to divergent edges

eg → East Pacific Rise

(iv) Fractures → Caused due to transform edge

eg → San-Andreas fault

(v) Earthquakes → Seismic activities are observed in this region on a regular basis due to the plate tectonic instability. } Good

eg → 2011 Japan Tsunami

(vi) Archipelago → Group of small islands formed due to volcanic activities

eg → Philippines, Malaysia, Java etc

The ring of fire is a spectacle of nature which provides us with geothermal energy, landforms, magma material which helps us in our energy demands as well as our study of our planet Earth

It's good that all arguments are substantiated.

Written in expected lines
keep it up.

well-concluded