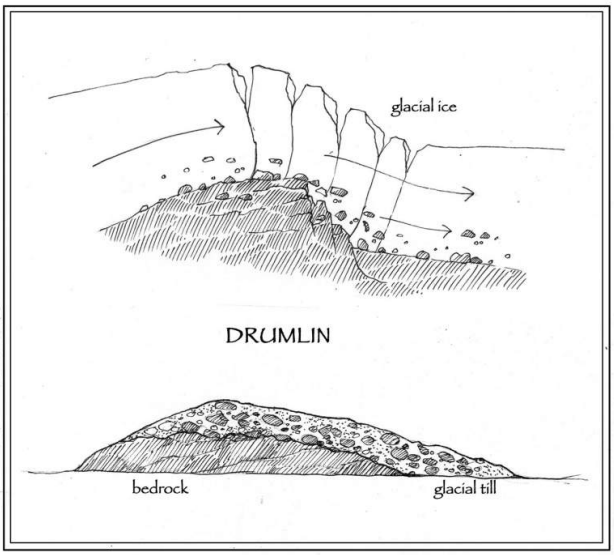
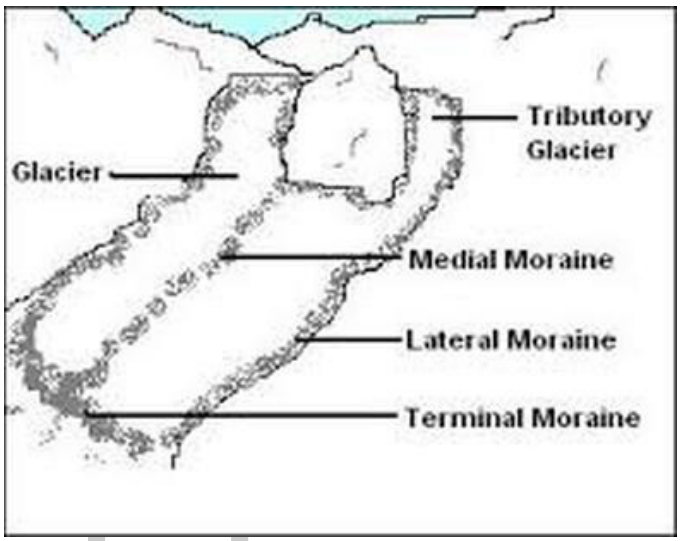
Depositional landform: It formed due to the setting down of glacial drifts (glacial sediments of varying sizes) including moraines, outwash plain and drumlins etc.

- **Moraines:** Alpine glaciers are fundamentally related to a single type of depositional feature i.e called moraines are morainic deposits. These are defined to be tongue-shaped deposits of unconsolidated, unsorted, broken rock materials as the descending glacier is subjected to ablation. These deposits are categorised into three defined subtypes (based on the location of deposits). These include lateral moraine, medial moraine and terminal moraine.
- **Outwash Plains:** Made up of fluvio glacial deposits washed out from the terminal moraines by the streams of stagnant ice mass. The melt waters sort and redeposit the material mainly consisting of layers of sand and other fine sediments.
- **Drumlins:** Smooth oval-shaped ridge-like features composed mainly of glacial till with sand and gravel. Oval or egg-shaped deposits of the glacial moraine are called drumlins.





(b) Discuss why the Circum–Pacific Belt is one of the most volcanically active parts of the world. 15

Approach:

- Begin the answer by giving a general introduction of Circum-Pacific Belt
- Explain the reasons why this area is most volcanically active
- Conclude suitably

Answer: The Circum-pacific belt extends over the margins of the Pacific Ocean. **About 80 percent** of all active volcanoes of the world are situated here. It is made up of over 450 active volcanoes. Ninety percent of Earth's earthquakes occur along its path, including the planet's most violent and dramatic seismic events. Due to the large number of active volcanoes here, this belt is often called the Pacific Ring of Fire.

- The abundance of volcanoes and earthquakes along the Ring of Fire is caused by the amount of movement of tectonic plates in the area.
- It traces boundaries between several tectonic plates—including the Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.
- Along much of the Ring of Fire, plates overlap at convergent boundaries called subduction zones. The plates that are underneath are pushed down, or subducted, by the plate above.
- As rock is subducted, it melts and becomes magma. The abundance of magma so near to Earth's surface gives rise to conditions ripe for volcanic activity.