

Q# 7(a)

What is Tsunami? How the Tsunamis generated?

What are their characteristics?

Tsunami is a set of waves caused by the displacement of water bodies. Almost 80% of Tsunamis occur around the Pacific Ocean 'The Ring of fire'. The reason behind it is the eruption of earthquakes and volcanoes occur in this region.

Generation of Tsunamis:

Tsunamis are generated by the underground earthquake, underground eruptions of volcanoes, underground landslides.

Mostly Tsunamis occurred due to the underground earthquake. When ocean floor is uplifted and offset by earthquake a set of waves are generated similar to concentric waves created by an object and dropped into the sea.

Characteristics:

The major difference b/w Tsunamis and other waves is the extreme difference between the wavelengths which means the length of one crest of a wave is different from other wave crest. That is upto 100-300km. Another

feature of Tsunami Waves is the small height of wave on the open sea that is upto half meter or one meter. They can travel 1000 km/h . The main destruction occur when wave reaches the land. If the trough reaches first then it pulls the water inside the sea and causes enormous currents. If the people living on the beach and beach sides, if recognised they have only few minutes or half an hour to move to the higher surface. Since both crest and trough causes destruction.