Your Name

Instructor Name

Course Number

Date

**Assignment**

Plate tectonics also called Lithospheric plate, is a scientific theory that deals with the Earth's outer shell (Lithosphere) and different processes of mountain-building, volcanoes and earthquakes. It also talks about the evolution of the earth's surface and the construction of its past continents and oceans. When a plate with oceanic lithosphere hits another plate, it plunges beneath that plate and sinks into the mantle pulling the lithosphere in every direction. This is the main cause of plate tectonic occurrence.

Some of the most destructive natural hazards caused by plate tectonics are earthquakes, tsunamis and volcanic eruptions. Earthquakes occur due to the sudden movement of two adjacent tectonic plates and when one plate slides over the top of another plate, it results in a volcanic eruption. Their energy and friction makes the rock melt and pushes it upwards, causing swelling in the surface of the mountain. These also cause seismic sea waves, also known as tsunamis.

An abrupt climate change is the occurrence of a new sudden climate state. The whole earth undergoes an entirely different process of climate change that includes a sudden change in parameters outside the system and internal changes in the climate system itself. We have a bunch of examples of abrupt climate change in the past and we are still in the process. Events like the Younger Dryas, occurred 12,800 years ago. Dansgaard-Oeschger events, Heinrich events, and Carboniferous Rainforest Collapse happened in the past. Abrupt climate change can occur at any time and some climatic changes are already underway. This happens due to a lot of reasons which include unawareness about such a critical issue. Not all the people who have high school education know this process of abrupt climate change. They are familiar with the term but unaware of all the reasons behind it which result in the climatic change. They get involved in activities that are harmful to climate like the recent decline of the Arctic sea due to warmer polar temperature and this increase in temperature is caused by humans. So it is important to know the process of climate change to save our planet.