Causes and effects of Earthquakes| sample answer

Q. Examine, with examples the main causes and effects of earthquakes (Hasn't been asked yet)

The earth's crust is broken into slabs, they are called plates. These plates are constantly moving because of convectional currents in the mantle (asthenosphere). There movements cause earthquakes.

Earthquake are vibrations in the earth's crust that occur when strain in the crust is suddenly released by displacement along a fault line.

The origin of the earthquake is call the focus, directly above the focus, on the surface is called the epicenter. Tremors disperse from the focus.

When an oceanic plate subducts under a less dense continental plate, it is called a subduction zone. These zones create powerful earthquakes. (eg Asian Tsunami Quake 2004).

The subduction is a sudden burst and the focus can be up to 300km under the surface. They are usually 8 or 9 on the richter scale. When 2 continental plates collide, fold mountains are formed. (eg Himalaya Mountains)

The creations of fold mountains cause shallow quakes. The focus can be only 70km under the surface. Since they are shallow they can be very powerful eg the Sichuan Quake, China was 8 on the richter scale and only 19km below.

When 2 plates pass each other, shallow quakes may occur (eg the boundary between the North American plate and the Pacific Plate.)

They can either slick smoothly past one another another or lock against another, when this happens, pressure builds up for centuries and then in a jolt in releases. Causing huge damage because of the sudden movement.

There are immediate effects and long term effects:

Death and destruction, tsunamis, gas explosions, fire, loss of freshwater and homelessness. During the quake of Burren 2004, a devastating tsunami was an effect.

The wave effected 11 countries in Southeast Asia, India and East Africa and cause more deaths and injuries than any other in history. The waves was 5 metres high, 320000 people were killed and 1.5m were made homeless.

Migration is a direct result of destruction. People's livelihoods, homes, business are destroyed. Mass migration cause problems in neighbouring countries.

Disease can sometimes be a problem. Water and sewerage pipes burst and take time to repair. A severe outbreak of cholera of the month that followed the earthquake in Haiti led to more deaths.

The economy after an earthquakes takes a large strain. Not just repairing costs but tourism and the time it takes for shops to reopen loses the government lots of money. In Haiti 1 in 5 jobs were lost.

Without recovering aid, devastated areas would not be able to recover. Everyone in the world tries to help. When Hati needed money the World Bank waived the countries debt repayments for 5 years.