

## 4. Disaster Management

- **Earthquake**

- It is the sudden shaking or trembling of the earth's surface because of disturbance deep inside the earth's crust.
- It cannot be predicted.

- **Causes**

- The uppermost layer of the earth is called crust. Crust is fragmented and each fragment is called plate. Movements of earth's plates (there may be collision or a brushing pass between two plates along their boundary). Plate boundaries are called seismic zones or fault zones.
- Earthquake may occur because of volcanic eruption.
- Kashmir, Western and central Himalayas, North-East India, Rann of Kutch, Gangetic plains, and some parts of South India are earthquake prone.

- Precautions to minimize the destruction caused by an earthquake:

- Buildings constructed in seismic zones should be strong enough to withstand earthquakes of high magnitudes.
- Specialist engineers and architects should be consulted to make quality buildings in these areas.
- Roofs of houses must be made as light as possible, so that if they fall the damages incurred are not huge.
- Heavy objects such as wall clocks, photo frames, decoration pieces etc. must be hanged in such a way that they do not fall on anyone during an earthquake.
- Fire fighting equipment must be installed properly in the buildings.
- Inside house → One should take shelter under a table. The head should be protected.
- Outside house → One should stay away from tall structures. One of the safe places is inside a car.

- **Flood:** It is the overflowing of the river due to excessive rains onto a normally dry land.
- **Cloudburst:** It is a sudden heavy rainfall over a short period of time on a limited area and leads to huge destruction.
- **Storms:** It is a strong disturbance in the environment resulting in strong winds or storms.
- **Forest fire:** An unmanageable fire in the forest either due to man-made or natural causes.
- **Tsunami** is a series of high waves set off by an underwater earthquake or volcano and causes huge damage to the coastal areas.
- A **volcano** is a natural phenomenon. This causes due to movement of hot substances from the interior of the Earth towards the surface of the earth.
- **Lightning** is a sudden flow of a huge amount of electric charges within a cloud, between two clouds or between cloud and ground this happens during thunderstorms.

Precautions to minimize the effects of disasters:

- Keep yourself updated about the weather by watching TV, listening radio news
- Always be ready with an emergency kit at home containing necessary items like a torch, first aid kit etc.
- Always switch off the electrical appliances before moving out of the house.

- Use local alert warning systems.
- Stay inside the house until and unless it is not necessary.

Before the availability of proper medical care, some medication should be provided to the person when he meets with an accident. Below are some remedial measures:

- External Bleeding: The wound should be cleaned properly and the person should be made to raise the bleeding part against the gravity and avoid any movement of that part.
- Burns: Apply anti-burn ointment and lay the person in open.
- Sunstroke: Take the person to a cool place and make him drink plenty of water.
- Snake bite: Tightly tie a handkerchief above the bite and restrict any movement.
- Dog bite: Wash the wound with water and antiseptic and then cover it with a bandage.