

## Sec - C

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### Forest Related Disasters :-

The most common disaster in forests is forests fire. Forests fires are as old as the forests themselves.

Forest fires are catastrophic and can bring about huge disasters if not contained and extinguished.

While some forest fires are caused by natural factors, the biggest cause of such fires is man related actions.

People from all walks of life can help contribute to the prevention of forest fires by being more responsible in their actions.

### Causes :-

Traditionally Indian forests have been affected by fires.

Causes of forest fires can be divided into two broad categories -

- i) Environmental — (which are beyond control)
- ii) Human Related — (which are controllable).

\*

Environmental causes are largely related to climatic conditions such as lightning which set trees on fire, temperature, wind speed and direction, and a level of moisture in soil and atmosphere. and these lead to the forest fires.



- \* Human Related causes result from human activity as well as method of forest management.  
e.g- naked flame, cigarette or bidi, electric spark.

### Prevention :-

The causes of forest fires have been increasing rapidly. So it is necessary to control such type of disaster by considering the following conclusions which are given below -

- \* Form a small group or join a local team that clears leaves and any plant growth on the soil bed of thick forests. This helps to remove dry brush that can fuel a fire in the forest.
- \* Be Careful when smoking cigarettes or bidi in the forest.
- \* Park your vehicles away from the trees and dry areas of the forest. Any fluid or fuel leakage from the cars can help to start a fire.
- \* Completely extinguish your camp fire if you have been camping in the forest.



- \* Refrain from using fire works in or near a forest. Fires can spread very quickly if sparks from fire crackers reach dry leaves in the forest.
- \* Use Caution when cooking on an open flame or grill in your backyard.
- \* Avoid spilling any industrial waste near forests. The wastes are normally toxic in nature and can prove to be one of the major causes of forest fires.

### Effect of forest fire :-

Fires are a major cause of forest degradation and have wide ranging adverse ecological, economic and social impacts including —

- \* loss of valuable timber resources
- \* degradation of catchment areas.
- \* loss of biodiversity of plants and animals
- \* loss of wildlife habitat and depletion of wildlife.
- \* global warming
- \* soil erosion affecting productivity of soils and production.
- \* ozone layer depletion
- \* Health problems leading to diseases.



## ## Mining Disasters :-

Civilizations have advanced, and the quality of life has improved with the differences that science and technology have brought into our lives. In countries like India, development has been a tedious and difficult process. Hard earned development gains are often lost when a disaster strikes, bringing losses to lives, property and livelihoods.

Mining accidents are accidents that occur in the process of mining metals or minerals.

Thousands of miners die from mining accidents each year, especially in the process of coal mining and hard rock mining. One important thing is that the surface mining usually is less hazardous than underground.

Most of the deaths today occur in developing countries, especially China. China's coal mines are the world's deadliest, killing an average of about ~~450~~ annual 13 miners a day.



Ex-① Benxiha Colliery accident in China which killed 1549 miners on April 26, 1942

② The tragic Courrières accident - the worst ever disaster in Europe, was directly caused by methane and dust. → 1099 miners → 10 March 1906

Date: mine  
Page: 1942

most important factors of accidents in the mining Industry —

\* Poisonous or Explosive gases present in the ground.

\* Use of explosives for rock breaking purposes.

Cause :-

mining accidents can have a variety of causes including leaks of poisonous gases such as hydrogen sulphide or explosive natural gases especially methane, dust explosion, collapsing of mine slopes, flood and some electrical equipments. Use of improper explosives underground can also cause methane and coal dust explosions.

Prevention :-

Prevention is better than cure, is an old saying which is very important in the context of disaster management.

Every year colossal amounts of resources are used by our govt. as well as aid agencies in relief and rehabilitation measures.

Awareness and education is an important tool in creating this culture of prevention and preparedness.



## # Earth quakes :-

The term 'earthquake' when mentioned, generally creates a sense of panic and destruction in the minds of people, since many earthquakes have taken heavy cost of life and property in the past in many countries.

Earthquake is one of the most destructive natural hazard. They may occur at any time of the year, day or night with sudden impact and little to warning.

They can destroy buildings and infrastructure in seconds, killing thousand of peoples.

Thus,

Earthquakes are sudden movement over the surface of the earth which shakes Earth crust that destroys the structures resting on the earth.

Cause :-

Types of Earthquake -

① Tectonic Earthquakes -

Tectonic earthquakes are exclusively due to internal causes i.e. due to disturbances or adjustments of geological formations taking place in the Earth's interior.



## Non-tectonic Earthquakes -

The non-tectonic Earthquakes are generally due to external or surficial causes. i.e. earthquakes which occur due to volcanic eruptions are known as Non-tectonic earthquakes.

### Causes :-

① Due to huge water falls — when huge quantities of water pound a particular place, tremors develop in the ground.

② Due to meteorites — Meteorites are heavenly bodies of various sizes wandering in the space. When they come under the influence of the earth's gravity field, they suddenly fall on the earth's surface and ~~causes~~ creates earthquake on the earth.

③ Due to occurrence of sudden and major land slides —

The impact of such land slides will be capable of causing earthquake.



④ Due to volcanic eruptions -

⑤ Due to tsunamis.

⑥ Due to man made explosions -  
minerals deposit, building materials -

⑦ Due to dams and reservoir -  
' Filled with high level of water.

Preventions :-

we are not about to predict earthquakes. As one door closes, another opens. If we cannot predict earthquakes, then let's learn to live safely with them.

The main safeties behind earthquakes are -

\* we should know safe spot in each and every room of our house.

\* maintain emergency food, water, medicine, first aid kit, tools and clothing.

During an earthquakes :-

\* Take cover. Go under a table or other sturdy furniture or stay close to the



Floor.

- \* Hold on to furniture legs for balance.
- \* ~~Be~~ Be prepared to move if your cover moves.
- \* If no sturdy cover is near by, sit close to the floor and place your hands on the floor for balance.

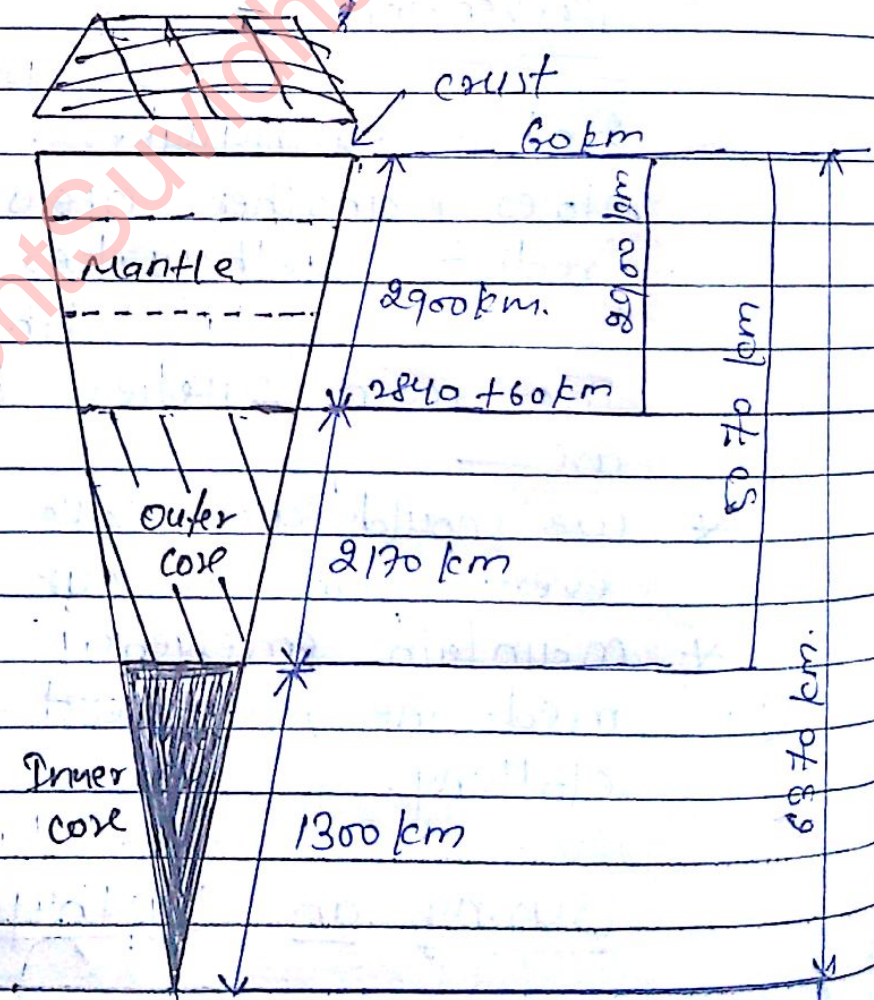


fig - Earth's Interior

Note - after the introduction of Earthquake