

NCERT MOST IMPORTANT QUESTIONS CLASS – 11

GEOGRAPHY GEOGRAPHY-INDIA PHYSICAL ENVIRONMENT CHAPTER- 7 NATURAL HAZARD AND DISASTERS

Question 1.

Differentiate between:

1. Natural Hazards and Natural Disaster.

2. Manmade disaster and Natural

Answer:

1.

Basis	Natural Hazards	Natural disaster
Meaning	Natural Hazards are elements of circumstances in the Natural environment that have the potential to cause harm to people or property or both.	Natural Disaster is an undesirable occurrence resulting from forces that are largely outside human control, strikes quickly with little or no warning, which causes or threatens serious disruption of life and property including death and injury to a large number of people, and requires therefore, mobilisation of efforts in excess of that which are normally provided by statutory emergency services.
Scope	Every natural hazard is not a disaster.	Every natural disaster is a natural hazard.
Example	USA facing -50 degree temperature every year. It is a hazard but due to preparedness, it never becomes a disaster.	Tsunami occurred in 2004 proved to be a great disaster.

2.

Basis	Manmade Disaster	Natural disaster
Meaning	Manmade disasters are undesirable occurrences resulting from human actions.	Natural Disaster is an undesirable occurrence resulting from forces that are largely outside human control, strikes quickly with little or no warning, which causes or threatens serious disruption of life and property.
Example	Bomb blast, industrial explosions, wars, fire accidents, etc.	Earthquake, landslides, cyclones, floods, droughts, etc.

Question 2.

Explain about different types of drought.

Answer:

Different types of droughts are as follows:

- **Meteorological Drought:** It is a situation when there is a prolonged period of inadequate rainfall marked with mal-distribution of the same over time and space.
- **Agricultural Drought:** It is also known as soil moisture drought, characterised by low soil moisture that is necessary to support the crops, thereby resulting in crop failures. Moreover, if an area has more than 30 percent of its gross cropped area under irrigation, the area is excluded from the drought-prone category.
- **Hydrological Drought:** It results when the availability of water in different storages and reservoirs like aquifers, lakes, reservoirs, etc. falls below what the precipitation can replenish.
- **Ecological Drought:** When the productivity of a natural ecosystem fails due to shortage of water and as a consequence of ecological distress, damages are induced in the ecosystem. Various parts of India experience these droughts recurrently which result in some serious socio-economic and ecological problems.

Question 3.

On the basis of past experiences, frequency and certain causal relationships with the controlling factors like geology, geomorphic agents, slope, land-use, vegetation cover and human activities, India has been divided into how many zones?

Answer:

On the basis of past experiences, frequency and certain causal relationships with the controlling factors like geology, geomorphic agents, slope, land-use, vegetation cover and human activities, India has been divided into a number of zones.

1. **Very High Vulnerability Zone:** Highly unstable, relatively young mountainous areas in the Himalayas and Andaman and Nicobar, high rainfall regions with steep slopes in the Western Ghats and Nilgiris, the north-eastern regions, along with areas that experience frequent ground-shaking due to earthquakes, etc. and areas of intense human activities, particularly those related to construction of roads, dams, etc. are very highly vulnerable.

2. High Vulnerability Zone: Areas that have almost similar conditions to those included in the very high vulnerability zone are also included in this category. All the Himalayan states and the states from the north-eastern regions except the plains of Assam are included in the high vulnerability zones.

3. Moderate to Low Vulnerability Zone: Areas that receive less precipitation such as Trans-Himalayan areas of Ladakh and Spiti, undulated yet stable relief and low precipitation areas in the Aravali, rain shadow areas in the Western and Eastern Ghats and Deccan plateau also experience occasional landslides. Landslides due to mining and subsidence are most common in states like Jharkhand, Orissa, Chhattisgarh, Madhya Pradesh, Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Goa and Kerala.

4. Other Areas: The remaining parts of India, particularly states like Rajasthan, Haryana, Uttar Pradesh, Bihar, West Bengal, Assam and Coastal regions of the southern States are safe as far as landslides are concerned.

Question 4.

Development may be disastrous. How?

Answer:

When the drive for economic growth occurs without regard to hazard profiles, existing mitigation technologies, and ongoing risk reduction programs, an increase in overall disaster risk results. Unsafe and unwise development practices lead to increased and additional risk factors, and often times result in an elimination of existing man-made and natural risk protections. For example, in many coastal communities where development of the tourism infrastructure leads to the destruction of coral reefs, mangrove forests, wetlands, and dunes, natural protections from storm surges and tsunamis disappear. In the aftermath of the 2004 tsunami in Asia, was wide evidence that the destruction of these natural resources led to increased devastation in some areas over others where the protection was maintained.

Question 5.

Why do the rich countries and the poor countries differ so much in terms of the nature of their disaster consequences?

Answer:

Poor people, and likewise poor countries, tend to be much more vulnerable to events that exceed their capacity to withstand disaster impacts and to respond once a disaster has occurred. They are also much less likely to effectively recover in the aftermath of a disaster event.

1. The interaction between exposure and vulnerability can explain a lot about a country's disaster profile. The instructor can illustrate the relationship between disasters and vulnerability by providing the students with an example of similar disaster events that occur in two different countries – one that is wealthy and one that is poor.

2. In most wealthy countries, an event of this magnitude causes little damage, very few injuries, and rarely any fatalities. However, in poor countries, it is not uncommon for a seismic event of this scale to cause significant injuries and fatalities.

3. In the wealthy countries, where buildings are constructed to code, and enforcement is effective, vulnerability is low to a magnitude 6.0 event. However, in poor countries, it is not uncommon for structures to be built in an informal fashion (out of traditional materials, including mud and stone, for example), with no consideration or enforcement of resistant building codes. In the event of a moderate earthquake, such as a 6.0 magnitude event, these informal structures can collapse.

4. It is poverty, and the many factors associated with poverty (such as corruption, poor access to building skills, knowledge, and materials, and other reasons), that create the vulnerability gap between the rich and the poor countries.

Question 6.

Disasters limit economic development. How?

Answer:

Disasters wipe out the gains of economic development. Examples include:

1. Hurricane Isaac (1982) – destroyed 22% of Tongo's housing stock.
2. Mozambique Flood (2000) – resulted in over \$165 million in costs to reconstruct and repair damage to water, sanitation, energy, telecommunication, roads and railway infrastructure.
3. Vietnam Flooding – each year in Vietnam, flooding destroys an average of 300,000 tons of food. Catastrophic disasters result in the destruction of a nation's assets, and interrupt production, trade, investment, and other economic engines. Larger countries, with a greater geographical spread of economic assets relative to the spatial impact of disasters, are more able to avoid direct loss and minimize downstream, indirect or secondary losses.

Question 7.

How can man survive with earthquakes?

Answer:

Man can survive with earthquakes by taking following precautions:

- When earthquake occurs we should leave the house. If it is not possible to go out of the house stand in four corners of the walls or get inside bed, table etc.
- Switch off all electricity connections in the house.
- There should not be any fire. Put off all types of fire like gas stove must be switched off.
- Never drive any vehicle during earthquake.

Question 8.**Explain about disaster management in short.****Answer:**

Disasters Management refers to the series of actions undertaken due to cyclones, unlike the ones caused by earthquakes, tsunamis and volcanic eruptions are more predictable in terms of the time and place of their occurrences.

Moreover, with the help of development of techniques to monitor the behaviour of cyclones, their intensity, direction and magnitude, it has become possible to manage the cyclonic hazard to some extent. Construction of cyclone- shelters, embankments, dykes, reservoirs and afforestation to reduce the speed of the winds are some of the steps that can help in minimizing the damages.

- Pre-disaster management involves generating data and information about the disasters, preparing vulnerability zoning maps and spreading awareness among the people about these.
- During disasters, rescue and relief operations such as evacuation, construction of shelters and relief camps, supplying of water, food, clothing and medical aids, etc. should be done on an emergency basis.
- Post-disaster operations should involve rehabilitation and recovery of victims. It should also concentrate on capacity-building in order to cope up with future disasters.

Question 9.**What are different stages of disaster preparedness and management?****Answer:**

There are three stages involved in disaster mitigation and management:

1. Pre-disaster management: It involves generating data and information about the disasters, preparing vulnerability zoning maps and spreading awareness among the people about these. Apart from these, disaster planning, preparedness and preventive measures are other steps that need to be taken in the vulnerable areas.
2. During disasters: During disasters, rescue and relief operations such as evacuation, construction of shelters and relief camps, supplying of water, food, clothing and medical aids etc. should be done on an emergency basis.
3. Post-disaster operations: It should involve rehabilitation and recovery of victims. It should also concentrate on capacity-building in order to cope up with future disasters, if any.

Question 10.**Development can help in disaster management as well as cause management.****Justify the statement.****Answer:**

Efforts to build upon and improve the social and economic engines, infrastructure, and institutions within a country can either increase or decrease hazard exposure, hazard vulnerability, and risk.

- (i) Practices that incorporate risk reduction methodologies, such as stringent building codes, resistant materials, proper land use planning, and other important mitigation measures and practices, often reduce the likelihood of disaster events or the consequences that result when events do occur.
- Unwise, uncoordinated, or unsafe development can quickly and dramatically increase the disaster risk faced by the people of a country.
- Mass urbanization and coastal migration which occur with little regard to wise building practices – as is often seen in the megacities of the developing world – is a primary contributor to increased risk of development.