

UNIT-3- Natural Hazards - Understanding of Disaster Management in Practice

Class: VII

Subject: Social- Geography

I. Choose the correct Answer:

1. _____ is a event which causes enormous physical damage to property, loss of life and change in the environment.

- a) Hazard b) Disaster c) Recovery d) mitigation

2. Activities that reduce the effects of disaster

- a) Preparation b) Response c) Mitigation d) Recovery

3. A sudden movement (or) trembling of the earth's crust is called an _____

- a) Tsunami b) Earthquake c) Fire d) Cyclone

4. A sudden overflow of water in a large amount caused due to heavy rainfall is called _____

- a) Flood b) Cyclone c) Drought d) Seasons

5. Road accidents can be avoided by permitting the persons who have _____ is allowed to drive vehicle

- a) Ration card b) License c) permission d) Documents

II. Fill in the blanks:

1. A hazard is a dangerous event that can causes harm or damage to human and his property

2. Activities taken during a disaster is called Disaster management

3. Displacement of water can produce one or more huge destructive waves known as Tsunami

4. In case of fire accidents call the nearby police station or the no 101 for the fire service

5. Disaster management refers to conservation of lives and property during a natural or man-made disaster

III. Match the following:

- | | | |
|------------------------|---|------------------|
| 1. Earthquake | - | Creak / Fault |
| 2. Cyclone | - | Eye of the storm |
| 3. Tsunami | - | Gigantic waves |
| 4. Industrial accident | - | Carelessness |
| 5. Drought | - | Uneven rainfall |

IV. Consider the following statement and tick the appropriate answer

1. **Assertion (A)** : In the modern world we can't live happily everyday.

Reason (R) : Due to pollution and environmental degradation we are undergoing natural hazard and Disaster

(a) A and R are correct and A explains R

(b) A and R are correct but A does not explain R

(c) A is not correct but R is correct

(d) Both A and R are incorrect

2. **Assertion (A)** Sudden movement (or) trembling of the earth's crust is called an Earthquake **Reason (R)**: Movement of the tectonic plates, mass wasting, surface fault all leads to earthquake

(a) A and R are correct and A explains R

(b) A and R are correct but A does not explain R

(c) A is incorrect but R is correct

(d) Both A and R are incorrect

V. Answer the following briefly

1. Define Hazard?

A hazard is a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury, health impacts, property damage, loss of livelihoods, services, social and economic disruption or environmental damage

2. What is disaster?

A disaster can be generally defined as "A serious disruption in the society causing widespread material, economic, social or environmental losses which exceed the ability of the affected society to cope using its own resources"

3. What are the six concepts of Disaster management cycle?

Preparation, Mitigation, Preparedness, Response, Recovery and Development are the six Disaster management cycles

4. Name any two agency which involves in warning system in Tamilnadu?

1. TNSDMA
2. DDMA
3. SDRF

5. Write about any three effects of flood?

Effects:

- Loss of life and property,
- Displacement of people and
- Spread of contagious diseases such as cholera and Malaria etc.,

6. Give any four Rail safety tips?

- Stay alert. Trains can come from either direction at any time,
- Never sit on the edge of the Station Platform,
- Cross the tracks safely

7. Name any four different industry which goes under industrial disaster frequently?

Defense, Energy, Food and Mining

VI. Distinguish between.

1. Earthquake and Tsunami

S. No	Earthquake	Tsunami
1	A sudden movement or trembling of the earth's crust is called as earthquake.	Huge destructive waves resulting in displacement of water.
2	It is caused due to movement of tectonic plates, mass wasting land slides, surface fault, etc.	It is caused due to under water earthquake.
3	It's after math leads to loss of property, damage to buildings and loss of life.	It causes flooding and disrupts transportation power communication and water supply

2. Flood and cyclone

S. No	Flood	Cyclone
1	Sudden overflow of water in a large amount due to heavy rainfall, cyclone, melting of snow, Tsunami or cloud/ dam burst.	A low pressure area which is encircled by high pressure wind is called a cyclone.
2	It causes loss of life and	Effects include heavy rain strong

	property and leads to spread of diseases such as cholera, malaria.	wind, landfall leading to damage of life and property.
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3. Hazard and disaster

S. No	Hazard	Disaster
1	A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury, health impacts, social and economic disruption.	A disaster can be generally defined as "A serious disruption in the society causing widespread material, economic, social or environmental losses which exceed the ability of the affected society to cope using its own resources".
2	Hazards are geophysical and biological.	Disasters are Natural and man made.

VII. Answer the following questions in detail

1. Write about disaster management cycle?

The six disaster management phases that have been used in the concept of disaster cycle are as follows;

Pre-Disaster phase:

Prevention and Mitigation:

1. The term prevention is often used to embrace the wide diversity of measures to protect persons and property.
2. Mitigation embraces all measures taken to reduce both the effects of the hazard itself and the vulnerable conditions to it in order to reduce the scale of a future disaster.
3. Therefore, mitigation may incorporate addressing issues such as land ownership, tenancy rights, wealth distribution, implementation of earthquake resistant building codes, etc

Preparedness:

1. The process includes various measures that enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively.
2. Preparedness includes for example, the formulation of viable emergency plans, the development of warning systems, the maintenance of inventories, public awareness and education and the training of personnel.

Early Warning:

1. This is the process of monitoring the situation in communities or areas known to be vulnerable to slow onset hazards, and passing the knowledge of the pending hazard to people harmless way.
2. To be effective, warnings must be related to mass education and training of the population who know what actions they must take when warned.

The Disaster Impact:

1. This refers to the "real-time event of a hazard occurrence and affecting elements at risk.
2. The duration of the event will depend on the type of threat; ground shaking may only occur in a matter of seconds during an earthquake while flooding may take place over a longer sustained period.

During Disaster Phase:

Response:

This refers to the first stage response to any calamity, which include for examples such as setting up control rooms, putting the contingency plan in action, issue warning, action for evacuation, taking people to safer areas, rendering medical aid to the needy etc., simultaneously rendering relief to the homeless, food, drinking water, clothing etc. to the needy, restoration of communication, disbursement of assistance in cash or kind.

The Post- Disaster Phase:

Recovery:

Recovery is used to describe the activities that encompass the three overlapping phases of emergency relief, rehabilitation and reconstruction.

Rehabilitation:

Rehabilitation includes the provision of temporary public utilities and housing as interim measures to assist long-term recovery.

Reconstruction:

Reconstruction attempts to return communities with improved pre-disaster functioning. It includes replacement of buildings; infrastructure and lifeline facilities so that long-term development prospects are enhanced rather than reproducing the same conditions, which made an area or population vulnerable in the first place.

Development:

In an evolving economy, the development process is an ongoing activity. Longterm prevention/disaster reduction measures. For examples like construction of embankments against flooding, irrigation facilities as drought

proofing measures, increasing plant cover to reduce the occurrences of landslides, etc.

2. Write about flood its effects and the mitigation

Flood:

Sudden overflow of water in a large amount caused due to heavy rainfall, cyclone, melting of snow, Tsunami or a dam burst.

Effects:

- Loss of life and property
- Displacement of people and
- Spread of contagious diseases such as cholera and Malaria etc.,

Mitigation for flood:

They include flood walls / sea walls, flood gates, levees and evacuation routes. Non structural measures reduce damage by removing people and property out of risk areas. They induce elevated structures, property buyouts, permanent relocation, zoning, subdivision and building codes

3. Write about any five general survival techniques?

General Survival Techniques:

1. During the earthquake be under the table, chair, kneel to the floor and protect yourself. Go near a sturdy wall, sit on the floor and hold the floor strongly and protect yourself. Use only torch lights,
2. During flood forecast, store up necessary things like first aid etc. Listen to the local Radio/TV for instructions. Cut off all the electrical supplies during flood and earthquake,
3. In case of fire accidents call fire service (No. 101)
4. If clothes are on fire, "Don't Run; Stop, Drop and Roll,"
5. Stay alert. Trains can come from either direction at any time,
6. Never sit on the edge of the Station Platform,
7. Cross the tracks safely.

4. Write about earthquake, its effects, and mitigation steps

Earthquake:

A sudden movement (or) trembling of the earth crust is called as earthquake. The movement of the tectonic plates, mass wasting, landslides, surface fault, etc., causes earthquake.

Effects:

Due to a strong earthquake, loss of lives, buildings, roads, bridges and

dams are damaged. Earthquake cause floods, tsunamis, landslides, fires, break down of water supply and electrical lines. It may change the course of a river too.

Mitigation steps:

1. Construct Earthquake resistant building.
2. Seek shelter under stable tables.
3. Move to open areas.
4. Secure your belonging.
5. Put latches on cabinet doors and file cabinets.
6. Store hazardous materials in a sturdy place.
7. Keep fire extinguishers

