

10. Disaster Management

Question 1.

Complete the table.

Disaster	Symptoms	Effects	Remedy

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Answer:

Disaster	Symptoms	Effects	Remedy
Motor accident	Rash driving, drink and drive, ignorance to safety rules	Loss of life, loss of property	Following traffic rules, avoid driving if tipsy
Land sliding	New cracks or bulges in the ground, street or sidewalks, sunken road beds	Loss of property, loss of life, adverse impact on environment	Give help to clear debris, call ambulance to send victims to hospitals
Forest fire	Lightning, human activities involving smoke and fire near forests areas	Impact on environment, loss of lives of animals	Call fire brigade, give first aid to animals which survived the burns
Theft	Sheer carelessness towards property and wealth	Tension and loss of property	Informing police, giving emotional support
Riot	Opinion differences, political influence	Loss of life and property	Give shelter to innocent victims, provide food and clothing and first-aid to the victims
War	Transgressing, opinion differences between countries	Loss of life and property, Impact on the country and its economy	Give shelter to innocent victims, provide food, clothing and first-aid to the victims
Epidemic	Spreading of viruses from different animals	Loss of life, health risks, impact on environment	Give proper medication to people, preparing antidotes against epidemic
Drought	No rainfall for long duration	Food and water crisis, loss of life	Donate food and water for victims, provide shelter and monetary help
Locust attack	Leaf distortion, chlorosis, yellow to brown spots, premature leaf drop	Crop destruction, scarcity in food	Spraying pesticides
Financial crisis	Bankrupt, loss in business or services in individual case	Impact on the country and its economy, impact on individual	Giving support to friends and family, asking support from other countries when crises happens in a country
Flood	Cloudburst, heavy rainfall	Health risks, loss of property, food and water crisis, loss of life	Donate food and clothing for flood victims, stay at some height if possible
Famine	Heavy rainfall, drought	Food and water crisis, displacement of people, loss of life	Donate food and water for victims, provide shelter and monetary help

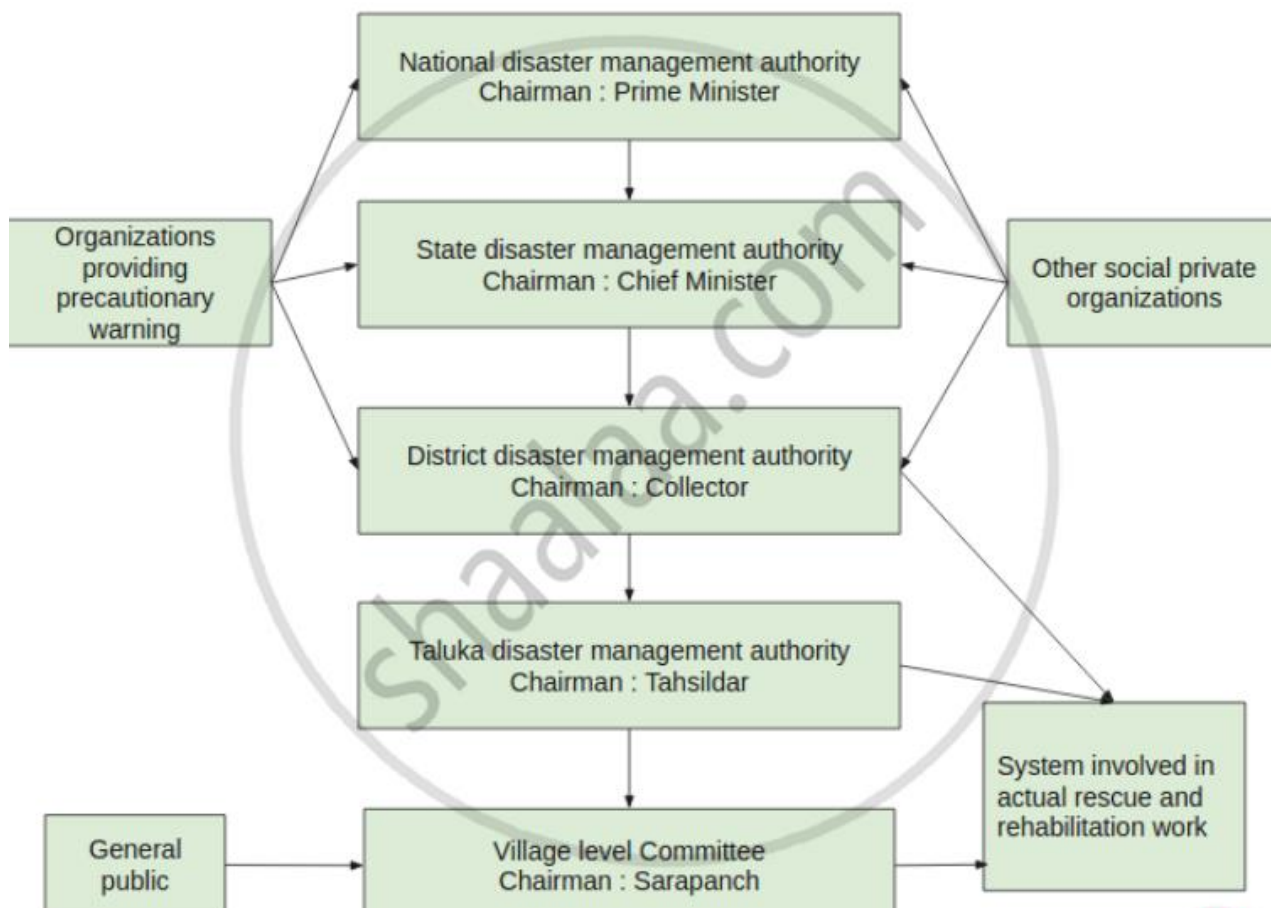
Question 2.

Write notes.

a. Disaster Management Authority.

Answer:

Disaster Management Authority has the responsibility of making the policies, plans and guidelines for disaster management to ensure timely and effective response to disasters. This authority has been established at the level of government. Following flow chart indicates the function of control and coordination under the disaster management from national to village level. Disaster Management Act, 2005 has been passed in our country.



b. Nature of disaster management.

Answer:

Disaster management is the strategy and course of action to be executed at the time of any such disaster to save as much life as possible. It can be divided into two parts:

Pre-disaster Management:

Pre-disaster management phase is concerned with the complete preparation and planning in order to enable us to face any kind of situation.

- The first step includes identifying the pro-disaster areas.
- The second step includes collecting information about intensity of disaster and probable sites of disasters using predictive intensity maps and hazard maps.
- Next step is to get training for disaster management.
- Another important aspect of pre-disaster management is spreading awareness among the common people through various awareness programmes.

Post-disaster Management:

Post-disaster management is concerned with the situation that arise after a disaster has occurred. It includes the following components:

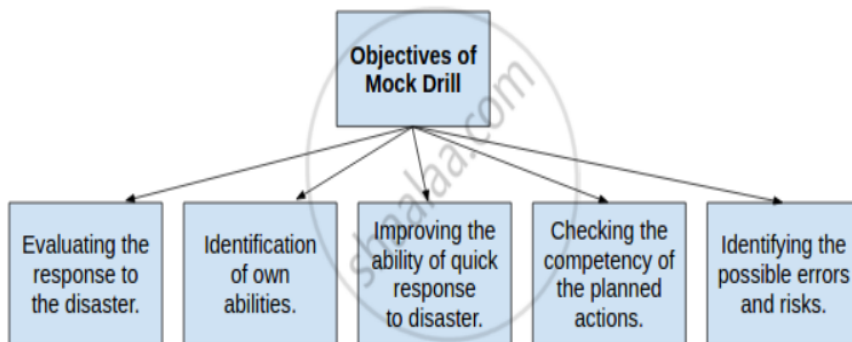
- The primary concern is to provide help to victims preferably with the participation of local people.
- Establishment of help centres to provide all kind of possible help required by the people.
- Categorisation of help materials that are received from the help centres and distributing them efficiently to the people affected by the disaster.

c. Mock drill.

Answer:

Mock drills are a way of checking the preparedness of facing a disaster. During mock drills, an apparent situation is created to check the reaction time and the type of response.

Mock drills are carried out in schools, offices, public places, etc. for situations like fire accidents, terrorist attack, etc.



d. Disaster Management Act, 2005.

Answer:

Government of India has made Disaster Management Act in 2005. The affected people are given all necessary help as per this act. With the humanitarian view, people are rehabilitated and helped them to come back to normalcy after the disaster.

As per this Act, National Disaster Response Force has been established. This force consists of 12 divisions in entire India which are attached with Indian Army. The headquarter is located in Delhi, but the action is taken all over the country with the help of army. As per the Act, in Maharashtra National Disaster Response Force is in action through State Reserve Polioe Force. The personnel of this force are trained accordingly, and they take part in the rescue work during different disasters.

Question 3.

Answer the following questions.

a. Explain the role of district disaster control unit after occurrence of any disaster.

Answer:

District-wise Disaster Control Unit performs following role:

- The review of various aspects of disasters is done.
- Through the disaster control unit there is continuous contact established with various agencies like army, air force, navy, telecommunication department, paramilitary forces, etc. for obtaining help.
- The unit also coordinates with various voluntary organizations for their help in disaster management.

b. Give the reasons for increase in human disasters after the World War-II.

Answer:

- After Second World War, the feelings of peace and brotherhood among the global citizens were lost. The geographic, religious, racial and ethnic differences sprang up tremendously.
- The financial losses had incurred in the World War II. The misuse of science and technology was done to retrieve these deficits.
- At the end of World War II, the atomic bombs were dropped in Japan. This has created health problems in the entire world.
- Social inequality, economic disparity, racial and religious differences were some adversaries that created unrest in the country.
- Later, the neighbouring nations kept on fighting. The geographical boundaries were changed. People always had feelings of insecurity. The terrorism flourished. All such instances gave rise to man-made disasters.

c. What are the objectives of disaster management?

(OR)

State any four objectives of disaster management. (March '19)

Answer:

The objectives of disaster management are as follows:

- Improving tolerance
- Preventing losses and dangers
- Providing relief to the affected people
- Preparing for actions to be taken at the time of disaster
- Assessing the damage caused
- Arrangement of rescue for the affected
- Rehabilitation and rebuilding the affected area

d. Why is it essential to get the training of first aid? (July '19)

Answer:

It is essential to get the training of first aid because of the following reasons:

- It enables the person to use appropriate precautionary methods to save lives during emergency.
- It enables the person to give primary help and medications to victims before actual medication.
- It enables the person to prevent further damage to victims.
- It enables the person to be relaxed and calm during critical situations.
- It enables the person to give comfort and care to the victim

e. Which different methods are used for transportation of patients? Why?

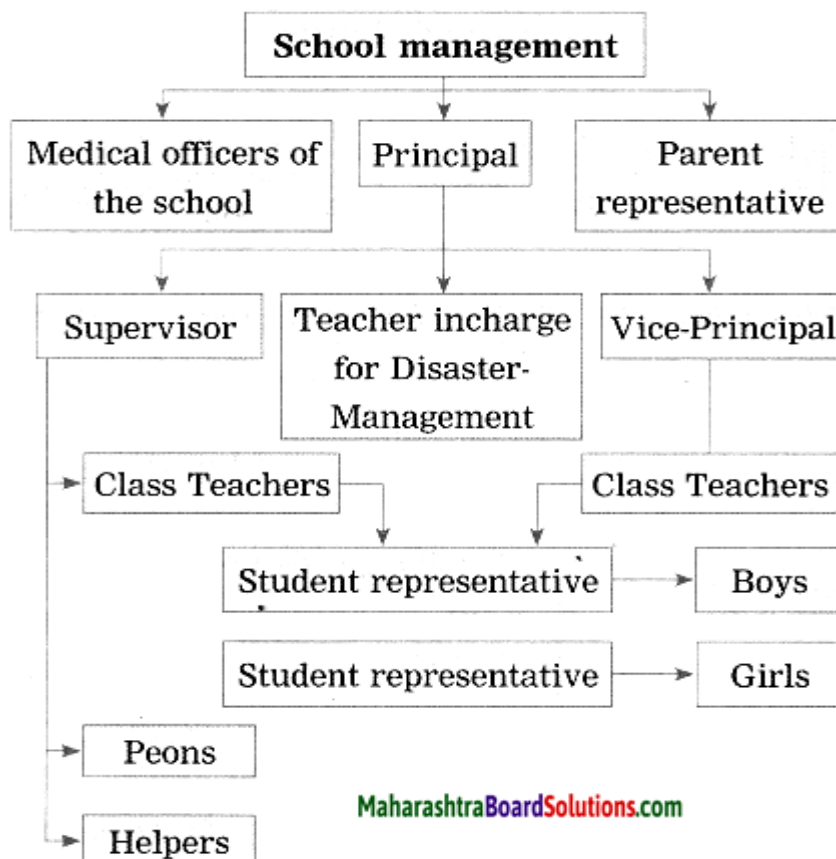
Answer:

In emergency condition, different methods are used for transportation of patients. The methods to be adopted depends on the condition of the patient. Following are the various condition to be adopted while transporting patients:

- **Cradle method:** useful for children and under-weight victims
- **Carrying piggy back:** useful for carrying patients who are unconscious
- **Carrying on two hands chair:** useful for those patients who cannot use their hands but can hold their body upright
- **Pulling or lifting method:** useful for carrying an unconscious patient through a short distance
- **Carrying on four-hand chair:** useful when support is needed for the part below the waist

Question 4.

On the basis of the structure of disaster management authority, form the same for your school.



Question 5.

Write down the reasons, effects and remedial measures taken for any two disasters experienced by you.

Answer:

Two disasters experienced are:

(i) Motor accident:

- Reason: rash driving and ignorance to safety rules
- Effects: Injuries to oneself and family as well as damage to property.
- Remedial measures: Giving emotional support to victims, calling ambulance and taking the victims to hospital

(ii) Theft:

- Reason: sheer carelessness towards property and wealth
- Effects: loss of life and property
- Remedial measures: Giving emotional support to victims, calling police to register the case

Question 6.

Which different aspects of disaster management would you check for your school? Why?

Answer:

For the pre-disaster management at school following aspects would be inspected.

- Are the telephones of the school working properly?
- Is there a first-aid box in each class?
- Are there any basic medicines in the school?
- Is the team ready for rescue of smaller children from lower classes?
- Has monitor or prefect participated in a mock drill? Does he/she know about first aid?
- Is the contact of parent representative available in emergency situations?
- Is the Medical Officer/Doctor present on the school campus?
- Is there enough drinking water and some dry snacks available in the school?
- Are the staircases and corridors suitable for quick evacuation of the children?

Question 7.

Identify the type of disaster.

a. Terrorism.

Answer:

Man-made, intentional.

b. Soil erosion.

Answer:

Natural, geophysical, geological.

c. Hepatitis.

Answer:

Natural, biological, animal-origin.

d. Forest fire.

Answer:

Natural, biological, plant-origin.

e. Famine.

Answer:

Natural, climatic.

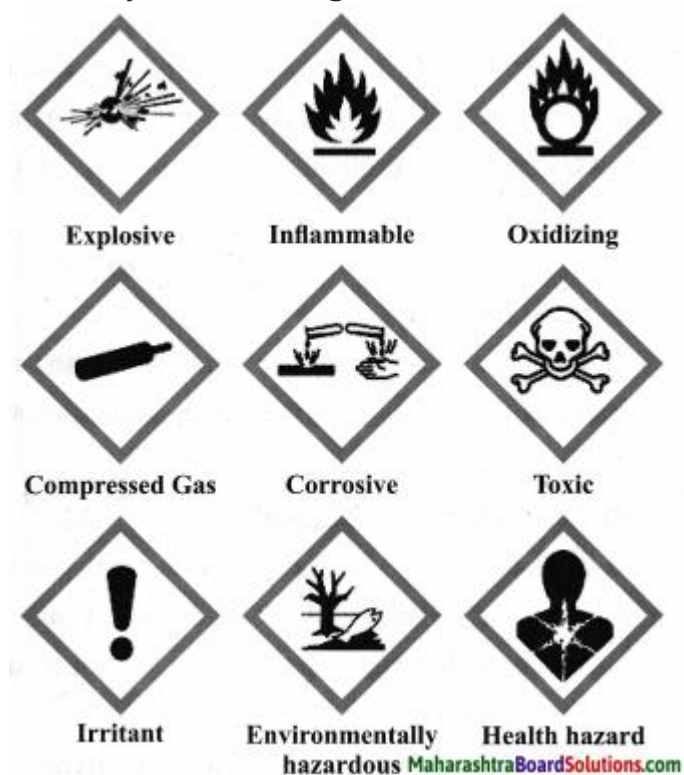
f. Theft.

Answer:

Man-made, intentional.

Question 8.

Some symbols are given below. Explain those symbols. Which disasters may occur if those symbols are ignored?



(1) Explosive: Some materials are explosive. While handling such materials care should be taken. We should not take anything that would cause fire leading to explosion. If explosion occurs, there would be a major disaster causing great loss of life and property. Thus if this sign is seen, great care has to be taken.

(2) Inflammable: Similar to explosive substances, the inflammable materials can also catch fire easily. Therefore, to warn people such sign is given on materials that can cause hazard by burning.

(3) Oxidizing: Some chemical substances are oxidizing. They carry out chemical reactions with a rapid speed. E.g. If potassium permanganate falls on the cloth, it starts the reaction on its C-C bonds. Due to such property of carrying out reactions, the cloths may catch fire. Therefore, oxidizing substances should be handled with care.

(4) Compressed: Compressed substances are filled under pressure in some container. If mishandled, they can come out of the container by bursting it open. This can cause some injuries.

(5) Corrosive: The corrosive substances are very reactive. The mere touch of corrosive substances can cause destruction of skin, eyes, respiratory passages, digestive organs, etc. rapidly. Just touching or smelling of such substances can cause major injury and thus warning sign of corrosive substance should never be ignored.

(6) Toxic: To taste a toxic substance or even to smell it, can lead to death. The packing of these substances are therefore marked as dangerous. They should be avoided as far as possible.

(7) Irritant: When skin or any delicate part of the body comes in contact with the irritant substance, it can cause harmful reaction. Especially, eyes, nasal mucosa and skin are affected by contact with corrosive substances.

(8) Environmentally hazardous: Many substances cause harm to the environment due to their toxicity. Air, water or soil can be polluted due to such pollutants. When environment is affected, ultimately these hazardous effects come back to human species. Therefore, such substances should be carefully used. Their use should be judicious and controlled.

(9) Health hazard: The substances that can cause hazard to our health should always be distanced from us. Such substances should not be kept in proximity. As far as possible they should be kept away and handled with great care if needed for any work. Materials marked with health hazard can cause severe toxicity.

Question 9.

Explain that why is it said like that?

a. Mock drill is useful.

Answer:

It is very correct to say that mock drills are very important and useful. These drills should be conducted at every work places, schools, public places etc. These drills ensure a way of checking the preparedness of facing a disaster. Through mock drills,

- we can evaluate the response or reaction time to a disaster
- we can identify our own abilities
- coordination between various departments of disaster control can be improved
- we can check the competency of the planned actions
- we can identify the possible errors and risks

b. Effective disaster management makes us well prepared for future.

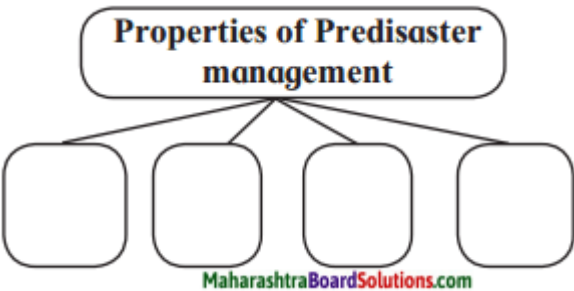
Answer:

We know that disasters are sudden and unplanned and thus can't be avoided in most cases. But if effective disaster management is employed and exercised, then we would certainly achieve the abilities to face the adverse effects of disasters. Hence, through effective disaster management, we actually make ourselves prepared for future. Through effective disaster management,

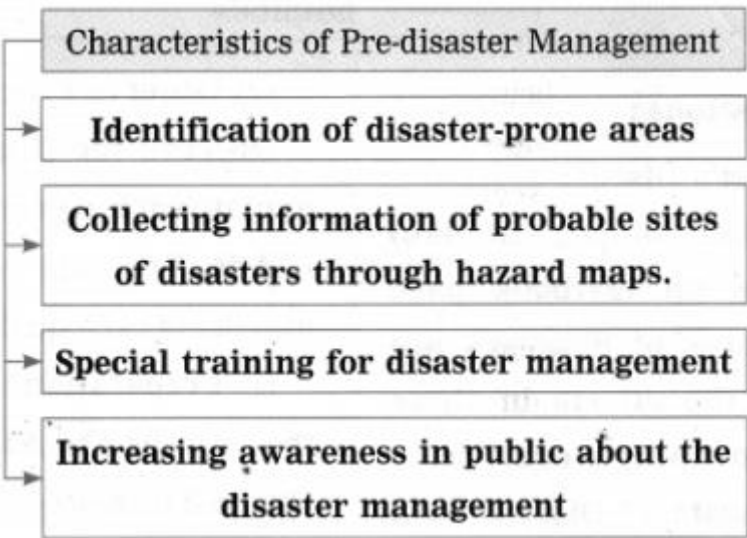
- we can supply essential commodities to the people after or before disaster
- we can arrange rescue for the affected
- we can rehabilitate and rebuild the affected area in short span of time
- we can minimise losses of life and property
- we can build tools to assess the damaged caused

Question 10.

Complete the following chart.



Answer:



Question 11.

Following are the pictures of some disasters. How will be your pre and post-disaster management in case you face any of those disasters?



(1)



(2)



(3)



(4)

Answer:

Disaster	Pre-disaster management	Post-disaster management
(1) Fight between the two groups	We will try to sort out the problem between the two groups. If that is not possible, will call the elders or teachers. If the fight is among the elders then police should be called.	If the fight is taking place, we shall try to separate the two. We shall check-up if anyone is injured. If injured, we shall give him first aid. We will also counsel them that they should not fight like this.
(2) Gas leakage	First and foremost, the windows and the doors will be opened immediately. We shall call the gas agency customer care department for help. The lights and the electrical equipment will not be turned on to avoid the accidents.	If the gas is already leaked in the house, we shall move out immediately along with pets if any. MaharashtraBoardSolutions.com
(3) Downpour due to cloudbursting	If the warning of the heavy rains is broadcast then people staying in low lying areas should be taken to the safe places. Schools and colleges are kept closed. If such students or young children or sick persons are stranded anywhere, they should be helped to reach their destinations before the rain starts.	By heavy rains, the transportation comes to halt. The water enters the houses in low lying areas. We shall help the people to deal with this disaster. Help can be given for draining the water. Municipal bodies open the storm water drains in such cases. With the help of elders, we shall spread the message of warning in such places. We will not play in the clogged water, but will help the people who are in need.
(4) Tornado	The warning of cyclonic tornado is given much before its approach due to modern techniques used at Meteorological department. The consequences of such event will be disastrous so as far as possible we shall not go out of house. If house is not in proper condition, then shelter is to be taken in any safe place.	We shall help the people who are in need. MaharashtraBoardSolutions.com