Chapter 10: Disaster management

Question. 1. Fill in the blanks using appropriate words given the bracket :
(Landslides, famine affected, volcanic eruption, lighting conductor, Drought, natural calamities)

(1) There is the possibility of loss of life and damage to property in **natural calamities**.
(2) **Drought** is the main cause of famine.
(3) Asia has turned out to be the most **famine affected** continent of the world.
(4) **Landslides** take place on a large scale due to tsunami.
(5) It rains often as a result of a **volcanic eruption**
(6) There should be a **lightning conductor** fitted at the height on your house.

Question. 2. True or false? Give reasons for your answer:
(1) Information about a forthcoming storm is to be kept secret.
Answer: False. Information about an upcoming storm should be shared widely to ensure public safety and allow people to prepare or evacuate if necessary.
(2) You should not swim when there is lightning in the sky.
Answer: True. Water is a good conductor of electricity, and swimming during lightning storms can lead to electrocution.
(3) It is possible to prevent the eruption of a volcano.
Answer: False. Volcanic eruptions are natural geological processes that cannot be prevented, though their impact can be mitigated through early warning systems and evacuations.
(4) Heavy rains result in famine.
Answer: False. Heavy rains can cause floods and crop damage, but famine is typically caused by prolonged droughts, food supply disruptions, or poor agricultural practices rather than just rainfall.

Question. 3. Find the odd man out:
(1) Famine, earthquake, cloudburst, railway accident.
Answer: Railway accident.
(2) Drought, heavy rains, storm, tsunami.
Answer: Drought
(3) Lava, hot mud, ash, locusts.
Answer: Locusts
(4) Washing away of crops, attack of pests on crops, volcano, singeing of crops.
Answer: Volcano

Question. 4. What are the remedial measures for the following calamities?
(1) Famine:
1. Ensure food storage and distribution systems are in place to provide affected areas with essential supplies.
2. Implement drought-resistant farming techniques and crop diversification.
3. Provide financial support or food aid to vulnerable populations during food shortages.

(2) Lightning strike:
1. Install lightning conductors on tall buildings and structures.
2. Avoid open areas, tall trees, and water bodies during thunderstorms.
3. Educate the public on safety measures such as staying indoors and avoiding metal objects during lightning.

(3) Storm:
1. Issue early warnings and evacuation alerts in storm-prone areas.

2. Strengthen infrastructure like buildings and power lines to withstand storm damage.
3. Maintain emergency response plans and relief measures for affected communities.

(4) Cloudburst:

1. Monitor weather patterns using advanced meteorological tools and issue timely warnings.
2. Create proper drainage systems and water diversion channels in high-risk areas.
3. Relocate people living in flood-prone zones to safer areas during intense rainfall warnings.

Question. 5. Write answers to the following questions in your own words:

(1) What are the causes of famine?

Answer:

1. Drought**:** Prolonged lack of rain reduces crop production and water supply.
2. Crop failure: Pests, plant diseases, or extreme weather conditions can destroy crops.
3. War and conflict: Disrupts food production and distribution systems, leading to shortages.
4. Economic factors: Poverty and poor infrastructure make it difficult to access food even if it's available.

(2) What are the measures taken to reduce the impacts of famine?

Answer:

1. Improved food storage: Storing surplus food during times of plenty to use during shortages.
2. Irrigation and drought-resistant crops: Ensure a steady food supply even during dry periods.
3. Emergency food aid: Providing immediate food relief to affected populations.
4. Education and awareness: Training farmers on sustainable farming techniques to increase productivity.

(3) What is a cloudburst?

Answer: A cloudburst is an intense, sudden rainfall over a small area in a short period, often leading to flash floods due to the inability of the ground to absorb such a large volume of water quickly.

(4) Explain the effects of a volcano.

Answer:

1. Lava flow: Molten rock flows down from the volcano, destroying everything in its path.
2. Ash clouds: Volcanic ash can cover large areas, affecting air quality, and damaging crops and infrastructure.
3. Pyroclastic flows: Hot gas and volcanic material rush down at high speeds, causing widespread destruction.
4. Environmental changes: Volcanic eruptions can cause long-term changes in the landscape and affect climate patterns.

(5) What is a tsunami? What gives rise to a tsunami?

Answer: A **tsunami** is a series of large ocean waves caused by disturbances such as undersea earthquakes, volcanic eruptions, or underwater landslides. The displacement of a large amount of water generates these waves, which can travel at high speeds and cause significant damage when they reach coastal areas.

(6) What are the disastrous effects of tsunami?

Answer:

1. Flooding: Coastal areas are submerged, causing property and infrastructure damage.
2. Loss of life: The fast-moving water can drown people and animals in its path.
3. Destruction of ecosystems: Marine life, forests, and other natural habitats can be devastated.
4. Economic impact: Damage to homes, businesses, and tourism affects the local economy.

(7) What measures have been taken to deal with calamities such as floods and landslides under the disaster management programme in Maharashtra?

Answer:

1. Early warning systems: Alerts are sent to people in vulnerable areas in advance of natural calamities.
2. Evacuation plans: Communities are evacuated from high-risk areas to safer locations.
3. Flood control measures: Building dams, reservoirs, and proper drainage systems to manage water levels.

4. Community awareness programs: Educating the public on how to respond during floods and landslides to reduce casualties.

Question. 6. Use your brain power! (Textbook page 66)

• Why shouldn't we wait at the foothill while it is raining heavily?

Answer: We shouldn't wait at the foothill during heavy rain because the rain can trigger landslides or flash floods. Waterlogged soil and loose rocks may slide down, posing a serious risk to people at the foothill. Additionally, rivers and streams can overflow suddenly, increasing the danger.