

# Environmental Management

---

## Exercises

**Q. 1. Match the items in column 'A' with the proper ones in column 'B' and explain their impact on the environment.**

### Column 'A'

1. Harmful waste
2. Domestic waste
3. Biomedical waste
4. Industrial waste
5. Urban waste

### Column 'B'

- A. Glass, rubber, carry bags, etc.
- B. Chemicals, pigments, ash, etc.
- C. Radioactive material
- D. Leftover food, vegetables, peelings of fruits.
- E. Bandages, cotton, needles, etc.

**Answer :**

Column 'A'	Column 'B'	Impact on environment
Harmful waste	Radioactive material	It contaminates environment and affects health
Domestic waste	Leftover food, vegetables, peelings of fruits.	Causes bad odor and spread diseases
Biomedical waste	Bandages, cotton, needles, etc.	They can spread diseases
Industrial waste	Chemicals, pigments, ash,	Produces toxic gases
Urban waste	Glass, rubber, carry bags, etc.	Accumulation of these things lead to calamity

**Q. 2. Complete the statements using the given options and justify those statements.**

(Geographic favourability, climate, weather, observatory)



- A. Of the abiotic factors that affect biodiversity by far the most important is  
..... .
- B. A description of the climatic conditions of short duration in a particular area is  
..... .
- C. Irrespective of the progress of human beings, we have to think about  
..... .
- D. Establishments where various climatic factors are recorded are called  
..... .

**Answer :**

**A.** Of the abiotic factors that affect biodiversity by far the most important is ...  
Geographic favourability.... .

**Explanation:** The geographical location, the climate and the soil are the fundamental non-living factors of the ecosystem.

**B.** A description of the climatic conditions of short duration in a particular area is  
...weather... .

**Explanation:** The condition of the atmospheric at a particular time at a particular place is referred as weather. It changes in a short span of time.

**C.** Irrespective of the progress of human beings, we have to think about  
.....climate..... .

**Explanation:** The weather conditions observed for longer period of time, it is found to be constant. The weather is related to a particular location and particular time whereas climate is related to a longer duration and larger area.

**D.** Establishments where various climatic factors are recorded are called .....  
observatory.... .

**Explanation:** Observatory place or building equipped with instruments which observe and records climatic and weather conditions.

**Q. 3. Answer the following questions.**

- A.** How is first aid provided to victims of disasters who are injured?
- B.** State the scientific and eco-friendly methods of waste management.
- C.** Explain with suitable examples, the relationship between weather forecasting and disaster management.
- D.** Why is e-waste harmful? Express your opinion about this.
- E.** How will you register individual your participation in solid waste management?

**Answer : A.** In case of injury, the wound should be covered with an antiseptic pad and apply pressure it for 5 minutes with either thumb or palm. If any bone is fractured of the injured it is necessary to restrict the movement of fractured part. It can be done with the help of any available wooden rods or batons or rulers.

**B. Scientific and eco–friendly methods of waste management are:**

- i. Separating of solid waste into dry waste and wet waste.
- ii. Composting of kitchen waste such as peels of vegetables and fruits in the terrace garden or in the garden.
- iii. Vermicomposting is a process of converting vegetable waste or food waste into fertilizer using earth worms.
- iv. Generation of energy by burning waste very high temperature. This process is called as Pyrolysis. Examples biogas, bioelectricity.
- v. Dumping of industrial solid waste such as plastic, clay liners in the landfills to avoid leaching of waste.
- vi. Burning of biomedical waste in the incinerator.

**C.** By weather forecasting we get to know about climatic conditions for the coming few days. Weather forecast predicts some unforeseen events which are going to happen such as heavy rainfall, landslides, storms, etc. therefore, in such situations disaster management can prepare for upcoming problems based on the weather forecasting report. Example: disaster happened in Kedarnath due to heavy rain and landslides.

**D.** E-waste stands for electronic waste which includes parts of TV sets, cell phones, music systems, computers, circuits and metals. These cannot be degraded. On burning these release some harmful gasses which can cause respiratory problems.

**E.** First of all you have to learn the techniques of solid waste management and then register yourself to pollution control department.

**Q. 4. Write notes.**

**Meteorology, Climatic factors, Monsoon model, Industrial waste, Plastic waste, Principles of first aid.**

**Answer :**

**Meteorology:** The science which studies the relationships between the atmosphere, natural cycles, geological movements of the earth and climate. Its study includes the study of storms, clouds, rainfall, thunder, lightning, etc.

**Climatic factors:**

The following are the climatic factors:

- Direction and speed of wind
- Temperature
- Atmospheric pressure

**Monsoon model:**

It is model of forecasting the monsoon season in India. Dr. Vasant Rao Govarikar in the decade of the 1990's proposed a monsoon model based upon 16 climatic parameters of the world. This model was in use from 1990 to 2002.

**Industrial waste:**

Solid, semi-solid, liquid, or gaseous, unwanted materials released from the industries into the environment is called industrial waste. Examples are chemicals, pigments, sludge, metals, ash, paints, sandpapers, and other paper products.

**Plastic waste:**

Plastics play a great role in our daily lives. Plastics are used in all areas of making things. Tons and tons of plastic products are made daily. Examples are water bottles, plastic bags, plastic cards, plastic sheets, etc. Most plastics are not biodegradable and creating environmental problems.

**Principles of first aid:**

- To check and provide help the victim in the right order of priority.
- To place victims in a comfortable position.
- To restrict the movement of injured parts.
- To relieve pain and restlessness if possible.
- To arrange evacuation if necessary in the correct priority.

**Q. 5. Give examples of the importance of climate in the living world with explanations, in your own words.**



**Answer :** Climate is the average condition of the weather over several decades. The conditions are temperature, wind velocity, and precipitation. These influence human life style directly or indirectly. Land, water bodies, plants and animals collectively form the natural environment on earth. This environment is responsible for the growth and development different organisms.

The climate of a particular region influences the diet, clothing style, housing, occupations and lifestyle of the people of that region. For example, the characteristics lifestyle of Kashmiri people in cold climate and the lifestyle of the Rajasthan people in hot climate.

**Q. 6. Explain with suitable examples, the care to be taken when using the methods of transporting patients.**

**Answer :** The methods and procedures in used to transport patients depends on type of injury.

**Examples:**

- Patients who are an unconscious are transported by carrying piggy back or by pulling or lifting method.
- Patients who cannot use their hands are transported by carrying on two-hand chair, while four-hand chair is used when support is needed for the part below the waist.
- Stretcher: In an emergency a temporary stretcher can be made using bamboos, blanket, to transport patients.

**Q. 7. Explain the differences.**

**A. Weather and climate**

**B. Degradable and non-degradable waste**

**Answer : A.**

	Weather	Climate
1.	Atmospheric conditions at a particular time at a particular place is called weather	Climate is the average condition of the weather over several decades on larger area.
2.	It changes continuously.	It remains constant in a region for a long duration.

**B.**



	Degradable waste	Non-degradable waste
1.	Waste which is easily degraded by bacteria and fungi into simple nutrients.	Waste which not degraded by bacteria and fungi. It requires very long time to decompose.
2.	Examples: spoiled food, fruits, vegetables, dung, parts of the plants,	Examples: plastic, metal cans

**Q. 8. Visit a nearby hospital and collect information about how waste is managed.**

**Answer :** Bandages, dressings, gloves, needles, saline bottles, medicines, medicine bottles, test tubes, body parts, blood, are the waste released from a hospitals. These articles are very harmful. The hospital staff collect all the waste and dumped in a landfill and covered it properly.

**Q. 9. Establish a vermin-compost project in your school under the guidance of your teachers.**

**Answer :** Vermicomposting is the process in which worms to process organic food waste into nutrient-rich soil. Worms eat decaying food waste and produce vermin-compost. A small storage container is taken to demonstrate vermicomposting. To process, food waste is put into the bin and then worms are added into the bin. The worms decaying food waste and produce vermin-compost.