Environmental Law and Sustainable Development



## **ENVIRONMENTAL LAW**

The 'Environment' is very important for us to understand because it constitutes our surroundings and affects our ability to live on the earth. It comprises of the air we breathe, the water that covers most of the earth's surface, the plants and animals around us, and much more. It is therefore, very important to understand and apprecaite the importance of 'environment' in our daily life. In recent years, scientists have been carefully examining the various ways by which people affect the 'Environment'. They have found that we are causing air pollution, deforestation, acid rain, and other problems that are dangerous both to the earth and to ourselves.

You may have heard of laws, rules and regulations to deal with the abovementioned situations. The Government in the last few decades has shown keen interest in protecting and promoting the environment and consequently enacted various Environmental Laws.

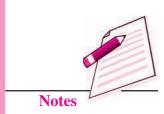
This lesson aims at discussing the details about the environment and its degradation with special reference to environmental pollution. The lesson further focuses on the laws pertaining to the protection of environment from pollution and other environmental issues. The discussion is also on other environment related issues.



## **OBJECTIVES**

After completing this lesson, you will be able to:

- explain the term 'environment; and its importance in our life;
- find out what is 'environmental pollution' and what are the various kinds of 'pollution';
- appreciate the need for protection of environment;
- identify the factors responsible for environmental pollution;
- know the various laws relating to the protection and promotion of environment; and
- understand the functions of Central Pollution Board and the State Pollution Boards.



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## 24.1 MEANING OF ENVIRONMENT

The word 'environment' is derived from the French word '*environner*', which means 'to encircle' or to surround. The most suitable definition of environment is as follows:

It is the sum total of water, air and land and the interrelationships that exist among them with human beings, other living organisms and materials.

The geographical meaning of environment is as follows:

It is a combination of living and non-living things and their mutual interaction with each other which leads to an ecosystem.

The environment encompasses all living and non-living things occurring naturally on earth. The Honourable Supreme Court has the following definition of 'environment':

"Environment" is a difficult word to define. Its normal meaning relates to the surroundings, but obviously, that is a concept which is relatable to whatever object it is, which is surrounded. Environment is a polycentric and multifaceted problem affecting the human existence.

Today protection of 'environment' is a global issue as it concerns all countries irrespective of their size, stage or development or ideology. Today, the interaction between society and nature is so extensive that the question of environment has assumed large proportions, affecting humanity at large.

# INTEXT QUESTIONS 24.1

- 1. Define the term 'Environment'.
- 2. Give the definition of 'Environment' as given by the Supreme Court of India.

## **24.2 ENVIRONMENTAL POLLUTION**

The term 'pollution' refers to unfavourable alteration to our surroundings, wholly or largely as a by-product of human's action through direct and indirect effects of changes in energy pattern, chemical and physical construction and abundance of organisms. Thus, it is the addition of any foreign material to water, air or soil, which may change immediately or after some time, the natural properties of these basic constituents further causing some unfavourable change by making them unfit and injurious. Industrialization, poverty, population-explosion, urbanization, over-exploitation of resources, etc. are some of the factors which have contributed to environmental deterioration.

## 24.2.1 Water Pollution

Water pollution is the contamination of water bodies (e.g. lakes, rivers, oceans, aquifers and groundwater). Water pollution occurs when pollutants are discharged

directly or indirectly into water bodies without adequate treatment to remove harmful compounds.



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Figure 24.1: Various Sources of Water pollution

#### 24.2.2 Air Pollution

Air contains a mixture of various gases like oxygen, nitrogen, carbon dioxide, argon etc. Air pollution is the introduction into the atmosphere of chemicals, particles, or biological materials that cause discomfort, disease, or death to humans, damage to other living organisms such as food crops, natural environment or built environment.

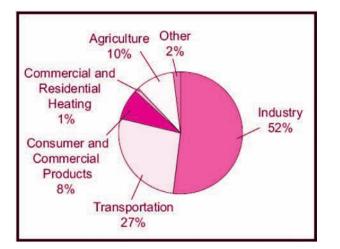
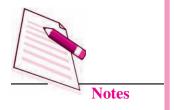


Figure 24.2: Percentage Contribution of Air Pollution

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The major sources of air pollution are:

- Industrial emissions
- Vehicular emissions
- Domestic emissions

The most common air pollutants in urban areas include Sulphur dioxide (SO<sub>2</sub>), Nitrogen oxides (NO & NO<sub>2</sub>), Carbon monoxide (CO), etc. Apart from this, the gases discharged from refrigerators, air conditioners etc. are responsible for depletion of the Ozone layer.



Figure 24.3: Smoke coming out of Chimneys

## 24.2.3 Noise Pollution

The word 'noise' originated from the Latin word 'nausea' meaning sea-sickness. 'Noise' is any unwanted sound that disrupts environmental equilibrium. Noise is measured in decibels. A major source of 'noise' is by motor vehicles, aircrafts, fire-crackers, sirens, loud speakers and machinery.

According to a survey conducted by the National Physical Laboratory, Delhi, Mumbai and Kolkata are amongst the noisiest cities in the world. Noise pollution has harmful effects on the environment, humans and animals. Some adverse effects of noise pollution on human health are:

- Hearing loss or hearing impairment;
- Rise in blood pressure;
- Cardio-vascular health effects;
- Increase in stress level; and
- Decrease in efficiency and concentration

Noise pollution is excessively displeasing to humans, animals, or we can say that machine-created environmental noise disrupts the activity or balance of human or animal life. The source of most outdoor noise worldwide is mainly construction and transportation systems, including noise from motor vehicles, noise from aircrafts, and noise from trains and engines. Poor urban planning may give rise to noise pollution, since industrial and residential buildings constructed side-by-side can result in noise pollution in the residential areas.

#### 24.2.4 Land Pollution

Deforestation, release of toxic substances on the land, throwing of unhygienic waste on earth, dumping of garbage, biomedical waste etc. causes land pollution. Excessive use of pesticides is also a source of land pollution as this effects the potability of water.

#### 24.2.5 Solid Wastes Pollution

Wastes are the materials that are not needed and are economically unusable without further processing. 'Solid wastes' includes agricultural wastes, ashes, bio-medical wastes, body parts of dead animals, dry or wet garbage from domestic activities which may contain plastics, metals, woods, glass, paper, detergents, industrial wastes, mining wastes etc.

#### 24.2.6 Food Pollution (Food Adulteration)

All living beings require food to obtain energy from which they carry on their daily activities. If the food consumed is polluted or adulterated it will have injurious effects on the consumer's health. The pollution of food begins by use of chemical fertilizers and various pesticides at different stages of plant growth. These chemicals directly or indirectly affect the quality of food and affects health of the consumer. Food also gets polluted during processing, storage, packaging and transportation.

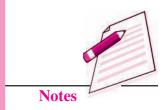
#### 24.2.7 Thermal Pollution

Temperature plays an important role in determining the conditions in which living organisms can survive. Any undesirable, harmful change in natural temperature disturbing the natural heat balance of the surroundings is called 'Thermal Pollution'.

#### 24.2.8 Nuclear (Radioactive) Pollution

One of the most important and dangerous types of pollution is 'nuclear pollution'. 'Nuclear pollution' is produced by nuclear explosion which are

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carried out for performing nuclear tests and which is further used for making nuclear weapons. Due to these explosions about 15 to 25% of the radioactive particles enter into the atmosphere. Once they enter into the atomsphere they continue to fall on the earth for several years. The best example is the Hiroshima Atomic Bombings.



Make a list of sources of 'air pollution', 'water pollution' and 'noise pollution':

Air Pollution	Water Pollution	Noise Pollution



- 1. Define the following terms:
  - a. Water Pollution
  - b. Air Pollution
  - c. Noise Pollution
- 2. Indentify the major sources of Air pollution.
- 3. Find out some adverse effects of noise pollution on human health.

## **24.3 ENVIRONMENT PROTECTION**

Environmental protection is a practice of protecting the natural environment at individual, organizational or governmental levels, for the benefit of the natural environment and humans. Due to the pressures of population and technology, the biophysical environment is being degraded, either partilly or permanently. This has been recognized, and governments have begun placing restraints on activities that cause environmental degradation. Since the 1960's, movements for the protection of environment have created awareness about the various environmental issues. There is no agreement on the extent of environmental impact on human activity, and protection measures are occasionally criticized.

Academic institutions now offer courses such as environmental laws, environmental studies, environmental management and environmental engineering, that teach the history and methods of environment protection. Waste production, air pollution, and loss of biodiversity (resulting from the introduction of invasive species and species extinction) are some of the issues related to environmental protection.

Environmental protection is influenced by three interwoven factors: environmental legislation, ethics and education. Each of this factor plays its part in influencing national-level environmental decisions and personal-level environmental values and behaviors. For environmental protection to become a reality, it is important for societies to develop each of these areas.

# INTEXT QUESTONS 24.3

- 1. Define the term 'Environmental Protection'.
- 2. List the factors which influences 'Environmental Protecton'.

## 24.4 NEED FOR PROTECTION OF ENVIRONMENT

The need for protection of environment can eaily be understood from the following facts:

- One billion people in the world have no clean water
- Two billion people have inadequate facilities of sanitation
- One and a half billion people (mostly in large cities of newly industrialized countries) breathe air that is dangerously unhealthy and so on.

The human beings as well as animals need clean food and water, and in order to have clean food and water, it is necessary to protect the ecosystem that make survival possible. If we do not stop pollution, it is sure that the world will come to an end.

# INTEXT QUESTONS 24.4

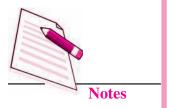
#### Fill in the Blanks

- 1. The human beings need clean food and water for \_\_\_\_\_.
- 2. If we do not stop pollutin, it is sure that the world will come to an \_\_\_\_\_

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## 24.5 LEGAL MECHANISM IN RELATION TO ENVIRONMENT PROTECTION

'Environmental Law' is an instrument to protect and improve the environment and to control or prevent any act or omission polluting or likely to pollute the environment. An environmental legal system is essentially a set of laws and administrative rules which regulate the relationships and conflicts between all the people concerned with the environment, as well as defining the relationships between people and the environment itself. The Honourable Supreme Court in *K. M. Chinnappa v. Union of India* defined "Environmental Law" as an instrument to protect and improve the environment and control or prevent any act or omission polluting or likely to pollute the environment.

In the Constitution of India, it is clearly stated that it is the duty of the State to "protect and improve the environment and to safeguard the forests and wildlife of the country". It imposes a duty on every citizen "to protect and improve the natural environment including forests, lakes, rivers, and wildlife". Reference to the environment has also been made in the Directive Principles of State Policy (Part IV) as well as the Fundamental Rights (Part III). The Department of Environment was established in India in 1980 to ensure a healthy environment for the country. This later became the Ministry of Environment and Forests in 1985.

## 24.5.1 Ministry of Environment and Forests (MoEF)

The Ministry of Environment & Forests (MoEF) is the nodal agency in the administrative structure of the Central Government for planning, promotion, coordination and overseeing the implementation of India's environmental and forestry policies and programmes. The primary concerns of the Ministry are implementation of policies and programmes relating to conservation of the country's natural resources including its lakes, rivers, biodiversity, forests and wildlife, ensuring the welfare of animals, and the prevention and abatement of pollution.

The broad objectives of the Ministry are:

- Prevention and control of pollution;
- Protection of the environment; and
- Ensuring the welfare of plants & animals

## 24.5.2 The Constitution of India

The 'Right to Life' contained in Article-21 of the Constitution of India includes the right to clean and human environment. It means you have the right to live in a clean and healthy environment. Article-38 of our Constitution requires State to ensure a social order for the welfare of people, which can be obtained by an unpolluted and clean environment only.

Article-48A of the Constitution requires the State to adopt the Protectionist policy as well as Improvinistic Policy. *Protectionist policy* imposes ban on those things which lead to environmental degradation, e.g. ban on use of leaded petrol, ban on use of plastic bags etc. *Improvinistic policy* refers to alternatives that can be used for improvement of environment, e.g. use of CNG or low sulphur fuel, tree plantation in industrial areas etc.

Article-48A of the Constitution declares "The State shall endeavour to protect and improve the environment and safeguard forests and wildlife of the country."

Article-51A(g) of the Indian Constitution says: "It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures."

## 24.5.3 The Water (Prevention and Control of Pollution) Act, 1974

The Water (Prevention and Control of Pollution) Act was enacted in 1974 to provide for the prevention and control of water pollution, and for maintaining or restoring of wholesomeness of water in the country.

This is the first law passed in India whose objective was to ensure that the domestic and industrial pollutants are not discharged into rivers, and lakes without adequate treatment. The reason is that such a discharge renders the water unsuitable as a source of drinking water as well as for the purposes of irrigation and support marine life.

In order to achieve its objectives, the Pollution Control Boards at Central and State levels were created to establish and enforce standards for factories discharging pollutants into water bodies.

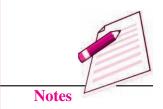
## 24.5.4 The Air (Prevention and Control of Pollution) Act, 1981

The Air (Prevention and Control of Pollution) Act, 1981 was enacted to provide for the prevention, control and abatement of air pollution in India. It is a specialised piece of legislation which was enacted to take appropriate steps for the preservation of natural resources of the earth, which among other things include the preservation of the quality of air and control of air pollution.

The prime objectives of the Act are the following:

- Prevention, control and abatement of air pollution;
- Establishment of central and state pollution control boards to implement the aforesaid purpose; and
- To maintain the quality of air.

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#### 24.5.5 The Environment Protection Act, 1986

It was the *Bhopal Gas Tragedy* which necessitated the Government of India to enact a comprehensive environmental legislation, including rules relating to storing, handling and use of hazardous waste. On the basis of these rules, the Indian Parliament enacted the Environment Protection Act, 1986. This is an umbrella legislation that consolidated the provisions of the Water (Prevention and Control of Pollution) Act of 1974 and the Air (Prevention and Control of Pollution) Act of 1981. Within this framework of the legislations, the government established Pollution Control Boards (PCBs) in order to prevent, control, and abate environmental pollution.

The objective of the Environment Protection Act is to protect and improve the environment in the country.

## **BHOPAL DISASTER**

The Bhopal disaster, also referred to as the Bhopal Gas Tragedy, was a gas leak incident in India, considered one of the world's worst industrial disasters. It occurred on the night between 2nd and 3rd December, 1984 at the Union Carbide India Limited (UCIL) pesticide plant in Bhopal, Madhya Pradesh. Over 500,000 people were exposed to methyl isocyanate gas and other chemicals. The toxic substance made its way in and around the shanty-towns located near the plant. Estimates vary on the death toll. The official immediate death toll was 2,259. The government of Madhya Pradesh confirmed a total of 3,787 deaths related to the gas release. According to other estimates, around 8,000 died within two weeks and another 8,000 or more have since died from gas-related diseases. A government affidavit in 2006 stated the leak caused 558,125 injuries including 38,478 partial disabling injuries and approximately 3,900 severe and permanent disabling injuries.

#### 24.5.6 The Noise Pollution (Regulation and Control) Rules, 2000

There was no direct provision for 'noise pollution' under the Environment Protection Act, 1986 or any other legislation. The increasing ambient noise levels in public places from various sources like industrial activity, generator sets, loud speakers, vehicular horns etc. have harmful effects on human health. It was the need of the hour to come with a law which would regulate and control noise producing sounds with the objective of maintaining the ambient air quality standards in respect of noise. Therefore, the Central Government framed 'The Noise Pollution (Regulation and Control) Rules, 2000'.

These rules have been laid down by the government to reduce environmental noise pollution. Certain standards, such as the ambient air quality standards, have been set by the government. The permissible levels of noise are different for different areas, such as industrial, commercial, residential areas and silence zones (area within the vicinity of hospitals, educational institutions or courts).

## 24.5.7 The Public Liability Insurance Act, 1981

This Act aims to provide immediate relief to the persons affected by accident occurring while handling any hazardous substance. It provides that every owner shall take out, before he starts handling any hazardous substance, one or more insurance policies providing for contracts of insurance. The objective of taking insurance is that the compensation resulting from the possible future accident is guaranteed.

The collector of the area has been empowered to verify the occurrence of any accident at any place within his jurisdiction and also cause publicity to be given for inviting applications from the victims for any compensation.

Apart from the insurance contract, the funding for the purpose of compensation is also generated by the Central Government by the establishment of "Environment Relief Fund." This fund may be utilized by the collector for paying the compensation.

## 24.5.8 The National Environment Tribunal Act, 1995

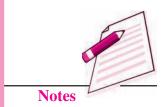
This Act is aimed to provide for strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a National Environment Tribunal for effective and expendition disposal of cases arising from such accident, with a view to giving relief and compensation for damages to persons, property and the environment and for matters connected with it.

The beauty of this Act lies in the fact that the liability of the owner of hazardous substance has been made strict in case of any accident and the resultant injury to public. In any claim for the compensation, the claimant is not required to plead and establish that the death, injury or damage in respect of which the claim has been made was due to any wrongful act, neglect or default of any person. So, the burden of proof does not rest upon the claimant of compensation which is a big relief for the victims.

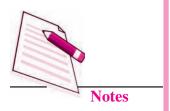
## 24.5.9 The National Environment Appellate Authority (NEAA) Act, 1997

The National Environment Appellate Authority (NEAA) was set up by the Ministry of Environment and Forests to address cases in which environment clearance is required in certain restricted areas. It was established by the National Environment Appellate Authority Act 1997 to hear appeals with respect to restriction of areas in which any industries, operations, processes or class of industries, operations or processes shall or shall not be carried out, subject to certain safeguards under the Environment Protection Act, 1986.

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## 24.5.10 The Ozone Depleting Substances (Regulation and Control) Rules, 2000

The Ozone Depleting Substances (Regulation and Control) Rules have been laid down for the regulation of production and consumption of ozone depleting substances. The main objective of this rule is protection of the Ozone layer. The rule restricts unauthorized sale, purchase, import, export and use of ozone depleting substance.

'Ozone Depleting Substances' (ODS) are the products which lead to the depletion of ozone layer. CFC (CHLOROFLUOROCARBON) is an example of ODS.

## INTEXT QUESTIONS 24.5

## Write True/False.

- 1. The Ministry of environment and Forests (MOEF) is the nodal agency for planning, promotion, cooperations and overseeing the implementation of India's environmental and forestry policies and programmes. (True/False)
- 2. The Water (Prevention and Control of Pollution) Act, 1974 was enacted to provide for the prevention and control of water pollution. (True/False)
- 3. The Air (Prevention and Control of Pollution) Act, 1981 was enacted to provide for the prevention, control and abatement of air pollution in India. (True/False)
- 4. The objective of the Environment Protection Act, 1986 is to protect and improve the environment in the country. (True/False)
- 5. The Noise Pollution (Regulation and Control) Rules, 2000 lays down rules to reduce environmental noise pollution. (True/False)
- 6. The Public Liability Insurance Act, 1981 aims to provide immediate, relief to the persons affected by accident occurring while handling any hazardous substance. (True/False)
- 7. The main objective of the 'Ozone Depleting Substances (Regulation and Control) (ODS) Rules, 2000' is protection of ozone layer. (True/False)

## 24.6 POLLUTION CONTROL BOARD

The Pollution Control Boards are statutory bodies constituted with an objective to protect and promote the atmosphere and to control pollution.

## 24.6.1 The Central Pollution Control Board

The Central Pollution Control Board (CPCB) a statutory organisation, was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974 to deal with the rise in pollution. Further, CPCB was

entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

Principal functions of the CPCB:

- (i) to promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution, and
- (ii) to improve the quality of air and to prevent, control or abate air pollution in the country.

## **Other Functions of the Central Board**

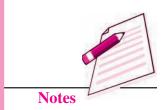
- Advise the Central Government on any matter concerning prevention and control of water and air pollution and improvement of the quality of air.
- Plan and cause to be executed a nation-wide programme for the prevention, control or abatement of water and air pollution.
- Provide technical assistance and guidance to the State Boards, carry out and sponsor investigation and research relating to problems of water and air pollution, and for their prevention, control or abatement.
- Prepare manuals, codes and guidelines relating to treatment and disposal of sewage and trade effluents as well as for stack gas cleaning devices, stacks and ducts.
- Lay down or modify (in consultation of the State Governments), the standards for streams or wells and lay down standards for the quality of air.

## 24.6.2 The State Pollution Control Boards

The State Governments also have their Pollution Control Boards for example, UPPCB (Uttar Pradesh Pollution Control Board), DPCC (Delhi Pollution Control Board), HPCB (Haryana State Pollution Control Board), RPCB (Rajasthan Pollution Control Board), etc.

## **Functions of State Boards**

- To advise the State Government on matter relating to pollution and on 'siting' of industries;
- To plan programmes for pollution control;
- To collect and disseminate information;
- To carry out inspection of polluting industries and areas;
- To lay down effluent and emission standards; and
- To issue consent to industries and other activities for compliance of prescribed emission and effluent standards



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- 1. Describe two main functions of Central Pollution Control Board.
- 2. List any two functions of State Pollution Control Board.



The environment is a place or surrounding where we live and to keep it clean is an essential requirement for the survival of human beings. Pollution is an unfavourable alteration of a surrounding. It is the addition of any foreign material to air, water or soil. Urbanisation, industrialisation, over-population, overexploitation of resources are some of the factors which have contributed to environmental deterioration.

Pollution is categorized in the following areas: Water pollution; Air pollution; Noise pollution; Land pollution; Solid Water pollution; Food pollution; Thermal pollution; Nuclear pollution

Every human being or animal requires food, clean water and clean air to make its survival possible. The various legislations, rules with respect to the protection and promotion of environment are:

- a. The Water (Prevention and Control of Pollution) Act, 1974;
- b. The Air (Prevention and Control of Pollution) Act, 1981;
- c. The Environment Protection Act, 1986;
- d. The National Environmental Act, 1995;
- e. The Noise Pollution (Regulation and Control) Rules, 2000;
- f. The Public Liability INsurance Act, 1981;
- g. The National Environment Appellate Authority (NEAA), 1997; and
- h. The Ozone Depleting Substances (Regulation and Control) Rules, 2000.

The Central Pollution Control Boards are constituted under the Water (Prevention and Control of Pollution) Act, 1974, to deal with rise in pollution.



- 1. Define the term 'Environmental Pollution'.
- 2. Explain the following terms
  - (a) Air Pollution
  - (b) Water Pollution
  - (c) Noise Pollution

- 3. Environment Protection Act is an umbrella legislation that consolidated the provisions of the Water (Prevention and Control of Pollution) Act of 1974 and the Air (Prevention and Control of Pollution) Act of 1981. Explain.
- 4. Describe the main functions of Central & State Pollution Control Boards.
- 5. Visit the river Yamuna, observe the activities going on there. Check the pollution causing activities. Write a report in five hundered words on the causes of pollution of Yamuna and the measures required to check it.
- 6. The levels of air-pollution are very high in Delhi these days. Taking help from the lesson, check out the causes of air pollution and the remedial measures to check further pollution. Write a report of about five hundered words.
- 7. Visit five major government hospitals of Delhi and collect data on the number of patients who come to the OPD with complaints of respiratory problems caused due to air pollution. Write your report in five hundered words referring to the relevant promises of law.
- 8. Assuming you are living in a residential area which also has two hospitals. The city airport which is located close to your colony works for 24 hours with flights landing and taking off. Incidentally, the colony already existed, but the airport authorities have started using a newly constructed runway recently. The day somehow passes off but at might, the deafening sound of landing and taking-off of aeroplanes traumatises the in-patients and contribute to them increasing stress levels which can be dangerous at times.
- 9. Draft a letter to the concerned authority stating the problem of these patients while referring to the applicable laws on noise pollution. Request them to close the airport atleast at night to give some respite to the patients in the hospitals.

# ANSWER TO INTEXT QUESTIONS

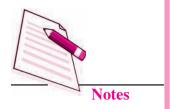
#### 24.1

- 1. 'Environment' is the sum total of water, air and land and the interrelationships that exist among them with human beings, other living organisms and materials.
- 2. "Environment" is a difficult word to define. Its normal meaning relates to the surroundings, but obviously that is a concept which is relatable to whatever object which is surrounded. Environment is a polycentric and multi-faceted problem affecting human existence.

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#### 24.2

- 1. (a) 'Water pollution' is the contamination of water bodies (e. g. Lakes, rivers, oceans, aquifers and ground water).
  - (b) 'Air Pollution' is the introduction into atmosphere of chemicals particals, or biological materials that cause discomfort, disease, or death to humans, damage to other living organisms such as good crops, natural environment, of built environment.
  - (c) Noise Pollution is any unwanted sound that disrupts environmental equilibrium and has harmful effects on environment, humans and animals
- 2. Industrial emissions; Vehicular emissions; and Domestic emissions
- 3. (a) Hearing loss or hearing impairment;
  - (b) Rise in blood pressure;
  - (c) Increase in stress level;
  - (d) Cardio-vascular health effects and
  - (e) Decrease in efficiency and concentration

## 24.3.

- 1. Environmental protection is a practice of protecting the natural environment at individual organization or governmental levels, for the benefit of natural environment and humans.
- 2. Environmental protection is influenced by three interwoven factors : environmental, legislation, ethics and education.

## 24.4.

- 1. Survival
- 2. End

## 24.5.

- 1. True
- 2. True
- 3. True
- 4. True
- 5. True

- 6. True
- 7. True

## 24.6.

- 1. The two main functions of Central Pollution Control Board are: (i) to promote cleanliness of streams and wells is different areas of the states by prevention, control and abatement of water pollution; and (ii) to improve the quality of air and to prevent, control or abate air pollution in the country.
- 2. The two main functions of State Pollution Boards are : (i) to advise the state government an matters relating to pollution and on siting of industring; and (ii) to plan programmes for pollution control.

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