

CHRIST KING HR. SEC SCHOOL KOHIMA
CLASS 9
SUBJECT: ENVIRONMENTAL EDUCATION, SECOND TERM

CHAPTER-7

(NATURAL RESOURCES)

TEXTBOOK EXERCISES (Page number: 89)

I. MULTIPLE CHOICE QUESTIONS (CHOOSE THE CORECT ANSWER):

1. (b) 2. (c) 3. (b) 4. (d). 5. (b)

II.VERY SHORT ANSWER QUESTIONS:

1. How much of total earth's surface in covered by water? And how much of total water is salty?

Ans: 70 per cent of total earth's surface is covered by water. 95 per cent of total water is salty.

2. How do fish and other aquatic animals breathe under water?

Ans: With the help of dissolved oxygen in water.

3. What is meant by precipitation?

Ans: It is the process which occurs by the evaporation of water from water bodies.

4. How much rainfall does India receive annually? How much of it is received during monsoons?

Ans: India receives about 117cm rainfall per year on the average.75 percent of this is received during monsoons.

5. What major role is played by forests?

Ans: Forests prevent floods and droughts.

Topic related questions:

1. Differentiate between Biotic and non-biotic resources with example.

Ans: Resources which are living organisms are called biotic resources. Examples are wildlife, forests and fish etc.

Resources which are non-living in nature are called non-biotic resources. Examples are land, water, minerals etc.

2. Differentiate between Renewable and Non- Renewable resources with example.

Ans: Renewable which can be multiplied by a biological or physical or chemical process are called Renewable resources. Examples are solar energy and wind energy.

Non- Renewable resources are those which once exhausted cannot be recycle or regenerated. Examples are minerals, metals petroleum and coal.

3. Give three function of air.

Ans: Three function of air are:

(i)It is used by humans and animals for breathing.

(ii) Plants consume carbon-dioxide present in the air in the presence of sunlight to form carbohydrates.

(iii) The layer of air around us protects us from the harmful effects of the ultraviolet rays from the sun.

4. Give three uses of water.

Ans: Three uses of water are:

(i)It is used for drinking, bathing washing clothes, cooking food etc.

- (ii) It is used for irrigation purposes.
- (iii) It is used to produce hydro-electricity.

5. What adverse effects will take place if we do not check global warming?

Ans: The temperature of the earth is increasing year by year. If this continues unabated, more snow from the hills will melt and the water moving to the sea through rivers will raise the sea level to an alarming level.

6. Give any five important functions of soil.

Ans: Five important functions of soil are:

- (i) It supports all living beings like plants and animals on land.
- (ii) Vegetables, fruits, food grains, fibre, wood, fodder for livestock etc, are all obtained from the soil.
- (iii) It is the life zone of the earth.
- (iv) It facilitates roots of plants to grow and expand.
- (v) It also helps in the operation of various bio, geo-chemical cycles.

7. What is bio energy?

Ans: The energy produced from a biological resource such as biomass or biofuel is called bio energy.

8. About 70% of the earth's surface is covered with water. Still we face a shortage of drinking water. Why?

Ans: This is because 95% of total water is salty water present in seas and oceans. It is not fit for drinking or for washing as it is hard water. Only 5% water is sweet water found in rivers, lakes, streams, ponds and wells. Only this water is usable.

9. How do solar energy and wind energy score energy from fossil fuels?

Ans: The energy obtained from the sun is called solar energy. Hot countries like India, where there are longer sunshine hours, this promises to be a potential source. Solar convectors have been developed which are used for heating water in winter. Solar cookers are now available for cooking of food.

Since early times, man has been using wind power to pump water and to grind the corn. Like other forms of energy, wind energy can be used to generate small amount of power, to irrigate land and perform other farming jobs. Raw materials for wind mills are wind which is free, never exhausting and pollution free.

**CHAPTER- 8
(DEPLETION OF RESOURCES, CAUSES AND IMPACT)**

TEXTBOOK EXERCISES (Page number: 100-101)

I. MULTIPLE CHOICE QUESTIONS:

1. (d) 2. (a) 3. (c) 4. (c) 5. (d)

II. VERY SHORT ANSWER QUESTIONS:

1. Why should we consume minerals and fossil fuels prudently?

Ans: This is because we have limited resources of minerals and fossil fuels.

2. Name three alternative sources of energy.

Ans: Solar energy, Tidal energy and wind energy.

3. What are the consequences of felling of trees?

Ans: (i) Soil erosion (ii) Floods (iii) Lowering of water table.

4. What is water harvesting?

Ans: It is a technique by which water is not allowed to drain away but is collected in specially made pits in the house.

5. What is drip irrigation?

Ans: It is a technique by which maximum area of land is irrigated with the minimum quantity of water.

Topic related questions:

1. List three causes of depletion of natural resources.

Ans: Three causes of depletion of natural resources are:

- (i) Overuse and irrational use
- (ii) Non-equitable distribution
- (iii) Population growth

2. Write three impacts of resource depletion.

Ans: Three impacts of resource depletion are:

- (i) Imbalance in nature
- (ii) Shortage of materials
- (iii) Struggle for existence

3. How does population growth put a pressure on availability of resources?

Ans: Population of the world has been growing at a fast rate particularly in India. Every sixth person on earth is an Indian. But, we don't possess one-sixth of the world's resources. Surely, there is a great pressure on our resources.

To provide shelter to the growing population, we build more and more houses. The housing activity takes place at the cost of forest land. That means depletion of forest area.

To feed more mouths, we require more farm lands which are obtained again by cutting forests. To irrigate farmlands, we have to channelise water ways. That means again loss of land. To provide amenities to the citizens, we need electricity. More and more thermal power stations are commissioned which consumed thousands of tons of coal. It means depletion of our minerals resources. With the construction of dwelling units, we also require schools, colleges, dispensaries, shopping centres and stadia all of which deplete the land resources.

4. Resource depletion has its impact in the following two ways:

- (a) Imbalance in nature
- (b) Struggle for existence

Explain.

Ans: (a) Archaeological records reveal that areas of Sind and Rajasthan were once green areas sustaining larger population and full of agricultural activity. It was due to overgrazing of these lands that they turned barren and become deserts.

Deforestation results in retaining less rain water on the land. That causes lowering of underground water table and also decrease in rainfall over the area. All these things cause a grave environmental imbalance. Forests are first converted into grassland and then to farmland to produce food grains for the growing population and then farmland is converted into dwelling area to provide shelter for still more people. So, environmental imbalance and still more imbalance.

(b) Due to resource crunch, there has been struggle for existence at the level of the neighborhood, city, province and countries. In states like Odisha and Bihar, many starvation deaths are reported as there is no food to feed them. A big percentage of the population is living below poverty line. This is a fall out of resource depletion. Due to cutting of forests, the animals are struggling for existence as they do not get the right environment to live. Disputes over power and water distribution take place between different states and different countries.

CHAPTER- 10
(SOURCES AND CLASSIFICATION OF WASTE)

TEXTBOOK EXERCISES (Page number: 125)

I. MULTIPLE CHOICE QUESTIONS:

1. (b) 2. (d) 3. (a) 4. (a). 5. (c)

II. VERY SHORT ANSWER QUESTIONS:

1. Name two events from natural calamities in India which cause a huge loss of life and produced lots of waste.

Ans: Plague in Surat and Tsunami in Tamil Nadu

2. What is meant by biomass?

Ans: Parts of plants after plucking vegetables and fruits and husks after removing pulses and food grains are called biomass.

3. Give the name and formulae of three fertilizers.

Ans: (a) Urea (NH_2CONH_2)

(b) Ammonium nitrate (NH_4NO_3)

(c) Potassium nitrate (KNO_3)

4. How does paper industry produce waste?

Ans: About 50% of the total wood used for paper production is ejected as waste in the form of wood chips, bark, etc.

5. What is the nature of waste produced from nuclear reactors?

Ans: Nuclear waste is radioactive.

Topic related questions:

1. What are wastes?

Ans: The useless left over or discarded materials are called wastes.

2. Give any three different sources of wastes?

Ans: Three different sources of wastes are:

(i) Domestic sources (ii) Industrial sources (iii) Agricultural sources

3. 'Plastic bags are the biggest nuisance in modern culture' Suggest any three points supporting the above statement

Ans: (i) Articles of daily consumption like milk, bread, curd, cakes, candies and pulses are packed in plastic bags which are discarded after use.

(ii) Plastic bags are one of the biggest waste materials.

(iii) Each family uses and throws tons of plastic bags in its lifetime.

4. Name two fertilizers and two insecticides.

Ans: Two fertilizers are urea, phosphates

Two insecticides are organophosphates, carbonates

5. Differentiate between biodegradable and non-biodegradable wastes.

Ans:

Biodegradable wastes	Non-biodegradable wastes
(i) These can be converted into resources.	(i) Some of these can be recycled.
(ii) These are biological in origin	(ii) These are mainly man-made.
(iii) These are degraded by micro-organisms	(iii) These are not degraded by micro-organisms.

6. What are non-toxic wastes?

Ans: Wastes that do not cause any toxic effects on living beings on exposure are called non-toxic wastes.

7. What is biomedical waste? Why special precautions are necessary to dispose such wastes?

Ans: Biomedical waste is the waste produce from the activities in a hospital.

A huge waste is obtained from the surgical, orthopaedical and maternity wards of the hospitals. These are in the form of used cotton, bandages, blood, flesh pieces, hair, broken plaster of pares, cultures, chemotherapy wastes etc. Pathology laboratory also releases considerable quantities of blood, urine, stool, semen, etc. which is earlier received there for investigation. These wastes are highly contaminated and a health hazard .Therefore, Special precautions are necessary to dispose such wastes.
