

CHRIST KING HR. SEC. SCHOOL, KOHIMA
CLASS 10
1st Term, ENVIRONMENTAL EDUCATION

CHAPTER-3
(CONSERVATION OF SOIL AND WILDLIFE)

TEXTBOOK EXERCISES (Page number: 38-39)

I. MULTIPLE CHOICE QUESTIONS:

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

II. VERY SHORT ANSWER QUESTIONS:

1. Ans: Great Indian bustard

2. Ans: UNESCO in 1975

3. Ans: 200 million years

Topic related questions:

1. What is weathering?

Ans: Break down of the rock material into small particles is called weathering.

2. What is soil erosion?

Ans: The depletion of top productive soil by the agency of water or wind is called soil erosion.

3. What is biofertilizers?

Ans: Living organisms which help in the fertilization of soil are called biofertilizers.

4. What is biopiracy?

Ans: Biopiracy means the unauthorized and uncompensated use of biological resources.

5. Differentiate between national park and sanctuary.

Ans: National park is an area reserved for the welfare of wild life. Activities such as agriculture, grazing of cattle, cutting of trees etc are not allowed to be carried out.

Sanctuary is a protected place for animals. Commercial activities such as collection of minor forest products, harvesting of timber and private ownership rights are allowed.

6. Write three harmful effects of soil erosion.

Ans: Three harmful effects of soil erosion are:

- (i) Soil fertility is lowered.
- (ii) Water quality suffers.
- (iii) Harmful to the water animals.

7. Mention any five principles and guidelines for the conservation of soil.

Ans: Five principles and guidelines for the conservation of soil are:

- (i) To protect the soil from the impact of rainfall.
- (ii) To make soil water-permeable.
- (iii) To increase the size of soil particles.

- (iv) To grow vegetation cover and ridges to reduce wind velocity.
- (v) To grow stripes of vegetation cover to stop and hold flowing particles of soil.

8. Give five different methods for controlling soil erosion.

Ans: Five different methods for controlling soil erosion are:

- (i) Rotation of crops or alternate cropping.
- (ii) Plantation like afforestation, reforestation, compensatory plantation etc
- (iii) Control on overgrazing.
- (iv) Terracing on hill slopes to check direct flow of water.
- (v) Putting ban on the farming on land near river banks.

9. List down six benefits of biofertilizers.

Ans: Six benefits of biofertilizers are:

- (i) Provide protection against diseases associated with numerous fungi
- (ii) Degrade toxic organic chemicals
- (iii) Improve soil porosity, drainage and aeration, water holding capacity
- (iv) Aid in building depleted soil
- (v) Aid in reducing soil erosion
- (vi) Promote the breakup of unproductive soil, turning into a productive growing medium

10. Explain briefly the three zones of a biosphere reserve.

Ans: Three zones of a biosphere reserve are core zone, buffer zone and manipulated (transition) zone.

Core zone – Core zone is where no human activity is permitted.

Buffer zone- Buffer zone is where human interference is allowed upto limited extent.

Manipulated (Transition) zone – Manipulated zone is where humans are free to perform their activities.

11. Give any three socio-economic importance of Mithun.

Ans: Three socio-economic importance of Mithun are:

- (i) Farmers mainly rear mithun for meat purposes. Besides this, it is also used as marriage gift.
- (ii) Mithun produces around 1 to 1.5 kg milk per day which is nutritionally superior to any other milk given by other domesticated milch animals.
- (iii) The quality of mithun hide is found to be superior in comparison to the traditional cow hide.

12. Differentiate between poaching and hunting.

Ans: Poaching is catching animals, birds, fish etc from a place without permission or authority.

Hunting is the practice of chasing and killing wild animals and birds as sport or for food.

13. Give three measures to prevent poaching and hunting.

Ans: Three measures to prevent poaching and hunting are:

- (i) Awareness should be created among the people.
- (ii) Punishment should be given to the poachers and hunters.
- (iii) Laws should be created by the government of India against poaching and hunting.

(APPLICATION OF BIOTECHNOLOGY AND PUBLIC AWARENESS PROGRAMMES)

TEXTBOOK EXERCISES (Page number: 46-47)

I. MULTIPLE CHOICE QUESTIONS:

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

II. VERY SHORT ANSWER QUESTIONS:

1. Ans: Excessive use of synthetic fertilizers, deforestation and water logging.
2. Ans: It causes a decreased rainfall.
3. Ans: Geography, chemistry, physics, climatology, soil science, economics, and sociology.
4. Ans: Primary, secondary and tertiary treatment

Topic related questions:

1. Define biotechnology.

Ans: Biotechnology can be defined as using living organisms or their products for commercial purposes.

2. Write the full form of GEMs.

Ans: Genetically engineered microbes.

3. What is GM food?

Ans: The food produced from genetically modified crops is called GM food.

4. What is genetic engineering?

Ans: The science of changing the pattern of development and behavior of an organism by making alteration in its genes is called genetic engineering.

5. Give three importance of genetic engineering.

Ans: Three importance of genetic engineering are:

- (i) The alterations in the genetic make-up of an organism can be done successfully through genetic engineering.
- (ii) It can be employed in increasing food production from plants and animals.
- (iii) It can be applied in the diagnosis of diseases and improvements in the medical treatment.

6. Give three adverse effects of deforestation.

Ans: Three adverse effects of deforestation are:

- (i) It causes a decrease in rainfall due to decreased evaporation and transpiration.
- (ii) It causes soil erosion and loss of soil fertility.
- (iii) It causes extinction of plants, microbial species and animals.

7. Write any three important points which public awareness programmes on forest conservation should highlight.

Or

Write any three public awareness programmes on forest conservation.

Ans: (i) Alternative fuels like LPG and CNG should be used in place of firewood.

(ii) For every tree cut, a new tree should be planted.

(iii) Paper should be recycled to conserve fresh wood from the trees.

8. Write any five objectives which public awareness programmes concerning soil conservation should aim.

Ans: (i) Trees should be planted in desert areas to check the velocity of wind.

(ii) Crop rotation should be followed to maintain nutrition in all soil.

(iii) Terrace farming should be adopted in slopes.

(iv) After two or three crops, the land covered with crop residue and plant residue should be left untilled for a year.

(v) Organic farming, using biofertilizers and biopesticides in place of chemical ones should be used.

9. Write any three public awareness programmes regarding the conservation of air.

Ans: Three public awareness programmes regarding the conservation of air are:

(i) Install precipitators in the chimneys of the industrial units.

- (ii) Use the system of car pool wherever possible.
- (iii) Grow more trees along the roads and particularly at the busy crossings.

CHAPTER- 5

(INDIGENOUS PRACTICES AND TRIBAL CULTURE)

TEXTBOOK EXERCISES (Page number: 55- 56)

I. MULTIPLE CHOICE QUESTIONS:

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

II.VERY SHORT ANSWER QUESTIONS:

1. Ans: By retaining and planting trees.
2. Ans: Increased production of food and increased national exports.
3. Ans: It gave a serious blow to tribals and their environment.
4. Ans: It is used as a fertilizer for the crops of tomato, chilli and onion.

Topic related questions:

1. What are indigenous practices?

Ans: Indigenous practices are the practical application of indigenous knowledge.

2. What is shifting cultivation?

Ans: Shifting cultivation is an agricultural system in which areas of land are cultivated for a short time.

3. What is aqua culture?

Ans: The practice of farming of aquatic animals on water bodies is called aqua culture.

4. Give three benefits of aqua culture.

Ans: Three benefits of aqua culture are:

- (i)The increased production of food for human consumption.
- (ii) The creation of employment especially in rural areas.
- (iii) Increased national exports.

5. Write three disadvantages of shifting cultivation.

Ans: Three disadvantages of shifting cultivation are:

- (i) It destroys watersheds.
- (ii)It easily leads to loss of biodiversity.
- (iii) It can easily lead to deforestation.

6. Mention five popular indigenous practices in our country for nature conservation.

Ans: Five popular indigenous practices in our country for nature conservation are:

- (i) Collection and storage of rain water.

- (ii) Celebrating the festivals related to nature and its resources.
- (iii) Protection of sacred groves in different communities and regions.
- (iv) Natural ways for pests and insects control and storage of food grains.
- (v) Worship of trees and celebration of Van Mahotsava, Earth Day, Environment Day, etc.

7. Write any five examples of tribal knowledge supporting the conservation of nature.

Ans: Five examples of tribal knowledge supporting the conservation of nature are:

- (i) Some tribal people have very good knowledge of medicines from forests and herbs for different types of treatments.
- (ii) Some tribes of India still cover their bodies with leaves and barks of trees.
- (iii) Many tribal societies earned money by selling forest produce like fruits, flowers and many others.
- (iv) Forests are the homes for tribal people, so they do their best to protect forests from other people.
- (v) Forests protect soil and also regulate the rain water.

8. Describe one pest control practice performed by the Chinese to save citrus fruits.

Ans; Century-old practice among citrus growers in china is to place nest of predacious ants in orange trees to protect the crops from insects. The farmers connect different trees with bamboo bridges, so that the killer ants can move from one tree to another.

9. Write a note on forest gardens.

Ans: In forest gardens, a range of products with high value food, comprising fruits, vegetables, meats and eggs are obtained on a permanent basis. Livestock particularly poultry constitutes an important components of forest garden. Forest gardens also have fish ponds, the fish are fed with animal and human wastes.
