

Unit-I:
MAN AND ENVIRONMENT

CHAPTER-1
DIMENSIONS OF ENVIRONMENT

Multiple Choice Questions: (Page-9)

1. Ans: (d) All the above
2. Ans: (b) Agriculture
3. Ans: (c) Economical dimension
4. Ans: (a) Frog
5. Ans: (d) All the above

TOPIC RELATED QUESTIONS:

1. Define the term environment.

Ans: Environment is defined as the sum total of conditions which surround man at a given point in space and time.

2. What does biotic dimension of the environment consist of?

Ans: Biotic dimension of the environment consist of flora or plant environment and fauna or animal environment.

3. What are the main dimensions of environment?

Ans: The main dimensions of environment are physical dimension, biological dimension and cultural or social dimension.

4. Which aspects of non-living environment affect life?

Ans: The non-living aspects like water and temperature greatly affect all forms of life on this earth.

5. What is faunal environment?

Ans: Faunal environment is the environment of the fauna or the animal life normally present in a given habitat at a given time.

6. What is floral environment?

Ans: Floral environment is the environment of the flora or the plant life normally present in a given habitat at a given time.

7. Differentiate between producers and consumers.

Ans: Mostly the green plants are called Producers because they can produce their food by themselves. They use solar energy to synthesis their food through the process called photosynthesis.

The organisms which get their organic food by feeding upon other organisms are called consumers. All types of animals including humans are consumers because they depend on producers for their food.

8. Differentiate between floral and faunal environment.

Ans: Floral environment is the environment of the flora or the plant life normally present in a given habitat at a given time.

Faunal environment is the environment of the fauna or the animal life normally present in a given habitat at a given time.

9. Differentiate between consumers and micro-consumers.

Ans: The organisms which get their organic food by feeding upon other organisms are called consumers. All types of animals including humans are consumers because they depend on producers for their food.

Micro-organisms are also known as decomposers. Micro-organisms break down the dead organic matter into smaller particles, simpler substances which are ultimately used by plants as nutrition.

10. Suggest a few ways to protect our fauna.

Ans: People have realized the necessity of faunal environment for the existence of life on this earth. So, many attempts have taken to preserve and protect our most precious fauna. Gradually it has been realized that wildlife is not just a 'game to be hunted', rather it is a gift of nature to be nurtured and enjoyed. A number of measures are now being taken to conserve our wildlife. National Parks, sanctuaries and Reserve forests help a lot in providing proper habitat for the wildlife. Even the Zoos, Botanical Gardens, Gene Banks, Seed Banks etc. play a vital role in preserving the endangered species. Apart from these, the attitude of the human beings needs to be changed towards the protection of our fauna. Use of eco-friendly and biodegradable products also helps a lot in the sustenance of the fauna. These are certain measures which can be taken for protecting our fauna.

CHAPTER-2
ROLE OF HUMAN IN ENVIRONMENTAL ACTIONS

Multiple Choice Questions: (Page-18 to 19)

1. Ans: (d) All the above
2. Ans: (c) Gariphema, Kohima, Nagaland
3. Ans: (c) Tobacco
4. Ans: (c) Scotland
5. Ans: (c) Plantic

TOPIC RELATED QUESTIONS:

1. Mention two adverse effects of tobacco on environment.

Ans: Two adverse effects of tobacco on environment are:

- (i) Tobacco is most erosive crop. It causes a loss of 45 kg of top soil of every 0.4 hectares of land per year.
- (ii) The pesticide and fertilizer consumption in tobacco farms is about 1.5 – 2 times greater than other crops.

2. Give any two important objectives of conservation of environment.

Ans: Two important objectives of conservation of environment are:

- (i) Spreading awareness.
- (ii) Ban on illegal poaching.

3. Explain the importance of the code of ecology.

Ans: The code of ecology is a set of principles which are essentials for our own survival on this earth. These principles not only stress on the protection of environment but also teach us the way of living harmonious life with nature. So, this code of ecology must be adopted and followed by each and every individual of the world in order to make this planet sustainable in allowing the life to exist on it for ever.

4. Why is environmental legislation required?

Ans: Environmental legislation is required for the rational use, management, protection and improvement of the environment as well as its resources. This legislation will guide, control and regulate human behaviour and actions towards environment.

5. Define environmental ethics.

Ans: Environmental ethics is the ethical relationship between human beings and the environment in which they live.

6. Name a biodegradable plastic and write its significance.

Ans: Plantic is a biodegradable plastic.

The significance of Plantic is:

It is the world's first truly eco-friendly plastic that is competitive in terms of cost and functionality with petrochemical based plastics. It is renewable, sustainable and non-toxic.

7. Write any four principles of code of ecology.

Ans: Four principles of a code of ecology are:

- (i) Providing steps and measures to protect and bring regenerability of the life support systems by rational utilization of all available resources that includes developing and protecting renewable resources, conserving non-renewable resources and prolonging their lives by recycling and re use.
- (ii) Willingness to adopt sustainability as a way of life by getting more from less and in association with others.
- (iii) Making measures to meet all the essential needs of society and logical, legal desires by combining economic and environmental necessities for eradicating poverty.
- (iv) Stopping and reversing the build up of armaments to propagate sustainable peace, security and environment.

8. Mention any six factors contributing to land degradation in Nagaland.

Ans: Six factors contributing to land degradation in Nagaland are:

- (i) Loss of vegetation due to deforestation
- (ii) Unsustainable fuel-wood extraction
- (iii) Shifting cultivation
- (iv) Unplanned agricultural practices
- (v) Forest fire
- (vi) Overgrazing

CHAPTER-3
SOCIETY AND ENVIRONMENT IN INDIA

Multiple Choice Questions: (Page-30)

1. Ans: (d) Forests
2. Ans: (a) Mutte
3. Ans: (a) 16
4. Ans: (d) Angami
5. Ans: (b) Bishnoi

TOPIC RELATED QUESTIONS:

1. Define conservation.

Ans: Conservation is the preservation of some level of biodiversity that is essential for the functioning of the ecosystem and the survival of mankind.

2. What is mutte?

Ans: Mutte is the name given to the body of traditional agricultural knowledge that only spiritual leaders can possess. It is a range of agricultural practices written on palm leaves.

3. What is rainwater harvesting?

Ans: Rainwater harvesting is the most cost effective and efficient way of water management.

4. List any eight different methods of Rainwater harvesting in India.

Ans: Eight different methods of Rainwater harvesting in India are:

- (i) Surangan in Kerala
- (ii) Zabo system in Nagaland
- (iii) Kuhals of Jammu
- (iv) Eris of Tamil Nadu
- (v) Virda in northern kutch in Gujarat
- (vi) Kuls of Himachal pradesh
- (vii) Guls of Uttarakhand
- (viii) Haveli of Madhya pradesh

5. Write any two methods of traditional rainwater harvesting in southern India.

Ans: Two methods of traditional rainwater harvesting in southern India are:

- (i) Surangan in Kerala

- (ii) Eris of Tamil Nadu
6. Write four importances of sacred groves.
- Ans: Four importances of sacred groves are:
- (i) They are often the last refuge for endemic and endangered plants and animals species.
 - (ii) They are store houses of medicinal plants valuable to village communities as well as modern pharmacopoeia.
 - (iii) They contain wild relatives of crop species that can help to improve cultivated varieties.
 - (ii) They also provide for the water needs of nearby communities.

7. Who are Bishnois? What views do they hold about environmental protection?

Ans: Bishnois are a follower of Guru Jambheshwar .It is believed that a long period of drought moved him to seek protection for all animals and plants. So, he formulated 29 principles of morality and conduct keeping an eye to the protection of environment. It is supposed that the term Bishnoi came from this 29 principles like 'Bish' means twenty and 'noi' means nine. Jamboji made it a rule that no trees were to be fallen and hunting was strictly forbidden. So, Bishnoi have a great compassion for all living beings. It is said that flora and fauna used to be flourished wherever Bishnois are found. Bishnois do not hesitate to lay down their lives for the sake of their environment. They have many immortal stories which clearly reflect Bishnoi's deep attachment towards their khejri trees, the black buck and the Indian gazelle.

CHAPTER-4 POPULATION AND ENVIRONMENT

Multiple Choice Questions: (Page-39)

1. Ans: (a) Deforestation
2. Ans: (d) All of these
3. Ans: (b) Fuel oil
4. Ans: (b) Enormous increase in population
5. Ans: (c) Oxygen

TOPIC RELATED QUESTIONS:

1. Define population explosion.

Ans: The enormous increase in the number of people is called population explosion.

2. Define greenhouse effect.

Ans: The green house effect is a natural process that warms the earth's surface.

3. How does poverty affect population growth?

Ans: Poverty affects population growth by enforcing larger families. The children in the poor family are considered to be wage earner. For the sake of extra earning, the people of poor families like to have more children .They didn't even bother the impact of population growth.

4. Differentiate between exhaustible and flow resources.

Ans: The resources which are used up as they are exploited are known as exhaustible resources. The resources present in the environment which can be used again and again are flow resources.

5. Discuss how population growth has resulted in deforestation and species extinction.

Ans: Population growth has appeared to be a prominent factor influencing environment including deforestation and loss of many species. It has been found by the experts that population pressure directly affects the loss of the forest covers. According to the reports of Food and Agricultural Organisation (FAO), 59% of forests are cleared during the last three decades in the developing countries due to human settlements, roads and other developmental works. FAO has also estimated that a further 20% of forest lands may have been lost because of the clearance for farmland due to the population growth.

The deforestation has also caused destruction of wildlife and disappearance of many species. The current extinction rate has been estimated between 50 to 100 species per day. This great extinction of species is undoubtedly due to the population growth.

CHAPTER-5
HUMAN ACTIVITIES AND DEGRADING ENVIRONMENT

Multiple Choice Questions: (Page-54-55)

1. Ans: (c) Antarctica
2. Ans: (a) Ultraviolet rays
3. Ans: (b) Volcanic eruptions
4. Ans: (d) All of these
5. Ans: (c) Nitrates

TOPIC RELATED QUESTIONS:

1. Define the following terms: (a) Overgrazing (b) Over cultivation (c) desertification.

Ans: (a) overgrazing refers to the excessive grazing of pasture in a given area by a great number of livestock.

(b) Over cultivation means continuous cultivation without allowing the land to remain free from cultivation for certain period of time.

(c) Desertification is a process where the productive potential of a land decreases rapidly.

2. What are farm wastes?

Ans: The wastes from farm animals like cattle, pigs and poultries are called farm wastes.

3. Write four effects of acid rain.

Ans: Four effects of acid rain are:

- (i) It corrodes metals.
- (ii) It weathers stone buildings and monuments.
- (iii) It injures and kills vegetation.
- (iii) It acidifies lakes, streams and soils.

4. Differentiate between urban environment and natural environment.

Ans: Urban environment is the physical environment of urban areas with its complex concentration of many people, buildings and economic activities with their supporting infrastructures like roads, drains, water pipes, electricity and telephone systems etc.

Natural environment is a peaceful zone being dominated by different plants, vegetations streams and animals.

5. Differentiate between migrant and floating population.

Ans: Migrants are the people who try to settle in a different place other than their native place. Usually the people from rural areas like to migrate to the cities and towns to improve their livelihood and prefer to settle permanently in towns.

The floating population refers to those kinds of migrants who come to the other places for a short period of time and go back to their own place after their work is over. For example the labourers of Bihar or U.P come to Punjab to earn their living during the farming season and go back after their work.

6. Explain briefly the harmful effects of using synthetic pesticides.

Ans: Extensive use of synthetic pesticides has caused the disastrous environmental hazards. They are relatively insoluble in water. So, they cling to the plant tissue and accumulate in the soil. They resist biological degradation and remains in the atmosphere for a long time. The pesticides affect to the plant eaters by remaining in the plant tissues and aquatic creatures by being directly absorbed through their skin. The pesticide is further concentrated as it passes from herbivores to carnivores and other creatures through food chain. The chlorinated hydrocarbons basically used for pest control has a great environmental effect. It interferes in the calcium metabolism of birds causing thinning of egg shells and subsequent reproductive failure. As a result some large predatory and fish eating birds are almost in the verge of extinction. Even the sufficient use of DDT is causing many health hazards in animals as well as in human beings.
