

## 2 Marks Que and Ans

### Unit-I

### Environment, Ecosystem and Biodiversity

1. Define Ecosystem.

A group of organisms interacting among themselves and with the environment is known as ecosystem.

2. Define heterotrophs.

Those organisms which depend on others for their energy requirements are known as consumers or heterotrophs.

3. Define food chain and food web.

The sequence of eating and being eaten in an ecosystem is known as food chain.

Plants → Rat → Snake → Eagle.

The interlocking pattern of various food chains in an ecosystem is known as food web.

4. What are Decomposers?

Decomposers feed on dead organisms, plants and animals and decompose them into simpler compounds.

Ex. Bacteria and Fungi

5. Define primary and secondary succession.

Primary succession - It involves the gradual establishment of the biotic community on a lifeless ground.

Secondary succession - It involves the establishment of biotic communities in an area, where some types of biotic community is already present.

6. What is species and genetic diversity?

Species diversity - Diversity between different species. Ex. Plant species - Apple, Mango etc.

Genetic diversity - Variation of genes within the species. Ex. Rice varieties.

7. What are the hotspots of biodiversity?

Geographic areas which possess high endemic species are known as hotspots of biodiversity.

Ex. Eastern Himalayas and Western Ghats.

8. What do you understand by endangered and endemic species?

Endangered species - Species is said to be endangered when its number has been reduced to a critical level. Unless it is protected and conserved it is in immediate danger of extinction.

Endemic species - Species which are found only in a particular region is known as endemic species.

9. What steps can be taken to conserve biodiversity?
- (i) In-situ Conservation
  - (ii) Ex-situ Conservation

10. What are the threats to the Indian biodiversity?
- Deforestation, destruction of wetlands, habitat fragmentation, raw material, production of drugs, illegal trade and developmental activities.

# Environmental Pollution

4

1. Give any 4 steps to control air pollution.

- \* Industries should be situated outside the city
- \* Using low sulphur coal in industries
- \* Reduce no. of private vehicles on road
- \* Plant more trees.

2. Define water pollution.

Water pollution can be defined as alteration in physical, chemical and biological characteristics of water which may cause harmful effects on humans and aquatic life.

3. What do you mean by BOD?

Biological oxygen demand (BOD) is defined as the amount of  $O_2$  required to decompose organic matter over a period of 5 days at  $20^\circ C$ .

4. Define thermal pollution.

Addition of excess of undesirable heat to water that makes it harmful to man, animal and aquatic life is known as thermal pollution.

5. What are the sources of marine pollution?

- \* Dumping the waste
- \* Oil pollution.

6. Define solid waste.

The Contamination of soil by human and natural activities which may cause harmful effects on living beings.

7. What is meant by hazardous waste?

The useless, unwanted, discarded material that may threat to human health and environment.

8. Define the term noise pollution.

The unwanted, unpleasant sound that causes discomfort for all living beings.

9. What is cyclone?

Cyclone is a meteorological phenomena - intense depression forming over the open oceans and moving towards the land.

10. Define earthquake.

It is a sudden vibration caused on the earth's surface due to sudden release of large amount of energy stored in the rocks under the earth's crust.

Natural Resources

1. State any two problems caused by construction of dams.
  - (i) Large forest area have been cleared
  - (ii) displacement of tribal people.
  
2. What are the two functions of forests?
  - \* They recycle rain water and remove pollutants from air.
  - \* They moderate temperature and weather and help to maintain humidity
  
3. Differentiate between deforestation and land degradation.

Land degradation - Loss of fertility of the soil.

Deforestation - Process of removal of forest resources due to many natural or manmade activities.
  
4. What is water logging?

Water logging is the land where water stand for most of the year.

5. What are the two adverse effects caused by overgrazing?

Land degradation, soil erosion, loss of useful species.

6. How can you differentiate between undernutrition and malnutrition?

\* People who cannot buy enough food to meet their basic energy needs suffer from undernutrition.

\* Deficiency or lack of nutrition often leads to malnutrition.

7. What are renewable and non-renewable energy sources?

Renewable energy sources are natural sources which can be regenerated continuously. They can be used again and again. Eg. Solar energy, Wind energy etc.

Non-renewable energy sources are energy sources that are not replaced. Ex. Fossil fuels, Coal etc.

8. What are the causes of land degradation?

Increase in population, increase in urbanization, increased applications of fertilizers and pesticides, damage of top soil.

9. Define Eutrophication.

A large portion of n and p used in crop fields is washed off by the run of water and reaches the water bodies causing overnourishment of lakes called Eutrophication.

10. Explain overgrazing.

A process of eating away of forests without giving it a chance to regenerate.



## Unit - 4

### Social Issues and the Environment

1. Define sustainable development.

"Meeting the needs of the present without compromising the ability of future generation to meet their own needs."

2. What is urbanization?

It is the movement of human population from rural areas to urban areas for the want of better education, communication, health, employment etc.

3. State the need for water conservation.

Over exploitation of ground water leads to drought. Agricultural and industrial activities require more fresh water.

4. What are the objectives of watershed management?

\* To minimize the risk of floods, droughts and landslides

\* To raise the ground water level.

5. What is environmental ethics?

It refers to issues, principles and guidelines relating to human interactions with their environment.

6. Define the terms climate and climate change.

Climate is the long-term average of a region's weather events grouped together.

Climate change is the representation of change in these long-term weather patterns.

7. Name some green house gases present in the atmosphere.

Carbon dioxide ( $\text{CO}_2$ ), Methane ( $\text{CH}_4$ ), Nitrous oxide ( $\text{N}_2\text{O}$ ), Chlorofluorocarbons (CFC), water vapour ( $\text{H}_2\text{O}$ ) and Ozone ( $\text{O}_3$ ) are some of green house gases present in the atmosphere.

8. Define green house effect.

The green house gases absorb and hold heat from the sun, preventing it from escaping back into the space, much like a green house absorbs and holds the sun's heat.

9. List the ozone depleting agents.

Chlorofluorocarbons (CFC's) are responsible for ozone layer depletion.

10

What are the effects of global warming?

- \* More heat waves
- \* More evaporation of water from oceans and water bodies
- \* Changes in pattern of rainfall
- \* Rise in sea level.

## Unit - 5

### Human Population and the environment

1. Give the reasons for human population.

- \* Birth rate increases
- \* Death rate decreases.

2. Define the term population explosion.

The population explosion defined as "sudden increase in population due to decrease in death rate and increase in birth rate"

3. Define doubling time.

The time needed for a population to double in size at constant annual rate is known as doubling time.

4. Define population density.

The number of individuals of population per unit area or per unit volume is known as a population density.

5. What are the sources of HIV infection?

HIV from the infected person can pass to a normal person through blood contact, unprotected sex with infected person.

Using needles or syringes, contaminated with small quantities of blood from HIV positive person.

6. What are the objectives and elements of value education?

- \* To improve the integral growth of human being
- \* To create good attitude toward other people and environment
- \* To increase awareness about our national history and culture.

7. What is value education? Give its significance.

Value education is an instrument used to analyse our interest, pleasure, likes, desires, needs and wants. To create attitudes and improvements towards sustainable lifestyle.

8. What is meant by NIMBY syndrome?

NIMBY means Not In My Back Yard, which describes the opposition of residents to the nearby location of something they consider undesirable, even if it is a benefit for many.

Name any two family welfare programme adopted in India.

\* In 1952, India started the family planning programme.

\* In 1979 Indian government forced family planning Campaign ~~the~~ programme all over the Country.

\* In 1978, minimum age for men and women was raised from 18 to 21 year and for woman from 15 to 18 yrs.

Write the objectives of EIA.

\* To identify who is the party

\* To identify main issues and problems of parties

\* To identify why are the problems arise.