# **QB365** Question Bank Software Study Materials

### Zoology - Environmental Issues Important 2 Marks Questions With Answers (Book Back and Creative)

12th Standard

Biology

Total Marks: 40

 $20 \ge 2 = 40$ 

### 2 Marks

1) Expand (i) CFC (ii) AQI (iii) PAN

Answer: (i) CFC - Chloro fluoro carbon
(ii) AQI - National Air Quality Index
(iii) PAN - Peroxyacetyl Nitrate

2) What effect can fertilizer runoff have on an aquatic ecosystem?

**Answer :** 1. Fertilizer runoff degrades aquatic eco system by promoting growth of algae, phytoplankton's and other aquatic plants.

2. A phenomenon called algal bloom will take place, by increasing oxygen consuming bacteria and lessening the available oxygen for plants and animals in the area.

3. Depletion of fish special general deterioration of water quality are the serious problems in aquatic eco system.

3) How does recycling help reduce pollution?

Answer: 1. Recycling prevents emissions of many greenhouse gases and water pollutants, and saves energy.

2. Using recovered material generates less solid waste.

3. Recycling helps to reduce the pollution caused by the extraction and processing of virgin materials

4) Define BOD.

**Answer :** BOD stands for Biological Oxygen Demand. It is the amount of dissolved oxygen required by aerobic organisms to break down organic material present in the water. It indicates the amount of organic pollution present in an aquatic ecosystem. It is also used in wastewater treatment to decompose organic wastes by aerobic organisms.

5) Define air pollution.

**Answer :** The alteration or changes in the composition of the earth's atmosphere by natural or human activities (anthropogenic factors) are referred as air pollution.

6) What is 4 'R'?

7)

Answer: 4 'R' refers to refuse, reduce, reuse and recycle. It is the best available remedy for plastic waste pollution.

# Define pollution.

**Answer :** Pollution is any undesirable change in the physical, chemical and biological characteristics of the environment due to natural causes and human activities.

8) What is air pollution?

**Answer :** The alterations or changes in the composition of the Earth's atmosphere by natural or human activities (anthropogenic factors) are referred as Air Pollution.

9) What are particulate matters? Give examples.

**Answer :** Particulate matters are tiny particles of solid matter suspended in a gas or liquid. Combustion of fossil fuels, fly ash produced in thermal power plants, forest fires, asbestos mining units and cement factories are the main sources of particulate matter pollution.

# 10) How ozone hole is developed?

**Answer :** Ozone depletion: Thinning of the stratospheric ozone layer is known as ozone depletion. Such depletion causes the 'ozone hole', resulting in poor screening of the harmful UV rays and increase in incidences of skin cancer. Some of the common agents that deplete ozone are CFCs.

<sup>11)</sup> Which organism is affected by colony collapse syndrome? What will be the impact?

**Answer :** Colony collapse syndrome in Honey bees due to pesticidesl herbicides can lead to destruction of hives and lower agricultural productivity.

12) Define the term eutrophication.

**Answer :** When run-off from land containing nutrients reaches water bodies like lakes, it results in dense growth of plant life. This phenomenon is called Eutrophication.

13) What is meant by accelerated eutrophication?

**Answer :** Pollutants from anthropogenic activities like effiuents from the industries and homes can radically accelerate the aging process. This phenomenon is known as Cultural or Accelerated Eutrophication

14) List out the chemical methods of wastewater treatment.

**Answer :** Chemical methods of wastewater treatment include:

(i) Generation of insoluble solids .

- (ii) Produce an insoluble gas.
- (iii) Produce biologically degradable substances from a non-biodegradable substance.
- (iv) Oxidize or reduce to produce a non-objectionable substance.
- 15) Expand RZWT and DEWATS.

**Answer :** RZWT Root Zone Wastewater Treatment DEWATS Decentralized Wastewater Treatment System

16) Complete the following:(a) Smoke +\_\_\_\_ = Smog

#### Answer: Fog

<sup>17</sup>) List two gaseous products that are produced when exhaust of an automobile passes through a catalytic converter.

Answer : Carbon dioxide and Nitrogen.

18) What is ozone shield?

Answer : The thin layer of ozone around the stratosphere, that prevent entry of UV rays is called ozone shield.

<sup>19)</sup> State the function of catalytic converts in automobiles. Name any two metals used in these converters.

**Answer :** (i) As the exhaust passes through the catalytic converter the unburnt hydrocarbons are converted into  $CO_2$  and  $H_2O$  carbon monoxide and Nitric oxide are converted into carbon dioxide and Nitrogen gas.

(ii) The metals include Rhodium, platinum and palladium.

20) Ecosan toilets are an excellent substitute for chemical fertilizers. How?

**Answer :** Superbug is term used to describe strains of bacteria that are resistance to the majority of antibiotics commonly used today.