

CBSE Class 12 Biology
Important Questions
Chapter 16
Environmental Issues

5 Marks Questions

1. Pollutant released due to human activities (like effluents from industries and homes) can radically accelerate the ageing process of the water body .

(a) Explain how does this process occurs during natural ageing of lake.

(b) Give the term used for accelerated ageing of water bodies. Also give the term used for the natural ageing of lake.

Ans. (a) The phenomeon is eutrophication. More nutrients in water , aquatic life increases organic remains deposited on lake bottom, lake grows shallower and warmer, gradually transforms into land due to deposition of silt and organic debris.

(b) Cultural or Accelerated eutrophication Natural ageing is Eutrophication.

2. In Arcata, the town's people have created an integrated waste water treatment process within a natural system. Acitizen group called FOAM helps in upkeep of this project.

(a) What are the main steps in waste water management done in this way?

(b) 'Ecosan' in Kerala and Sri Lanka is also an intiative for water conservation. How?

Ans. (a) Conventional sedimentation, filtering and chlorine treatment. Absorption and assimilation of pollutants by algae fungi and bacteria.

(b) 'Ecosan' derived from ecological sanitation. Handling human excreta using dry composting toilets. Its practical, hygienic and cost effective method.

3. What are the contribution of Ahmed Khan in Bangalore and Ramesh Chandra Dagar



in Sonipat?

Ans. Integrated organic farming is a cyclical, zero-waste procedure, where waste products from one process are cycled in as nutrients for other processes. This allows the maximum utilisation of resource and increases the efficiency of production. Ramesh Chandra Dagar, a farmer in Sonipat, Haryana, is doing just this. He includes bee-keeping, dairy management, water harvesting, composting and agriculture in a chain of processes, which support each other and allow an extremely economical and sustainable venture. There is no need to use chemical fertilisers for crops, as cattle excreta (dung) are used as manure. Crop waste is used to create compost, which can be used as a natural fertiliser or can be used to generate natural gas for satisfying the energy needs of the farm. Enthusiastic about spreading information and help on the practice of integrated organic farming, Dagar has created the Haryana Kisan Welfare Club, with a current membership of 5000 farmers.

4.i) What is meant by ozone shield?

ii) Name two ozone depleting substances?

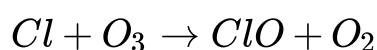
iii) How do ozone depleting substances affect ozone shield?

iv) Write one damaging effect of ozone – depletion on human & plants respectively?

Ans.i) The ozone layer present in the atmosphere acts as an ultraviolet absorbent thus protecting the earth from its harmful effect. The upper layer of atmosphere enveloped layer ozone is called ozone layer or ozone shield.

ii) Chlorofluorocarbon used in aerosol propellant, fire extinguisher, refrigeration etc.

iii) During depletion, the chlorine, fluorine, bromine, of CFCS & halogens are converted into reactive free radical form by photochemical reaction. Cl or F are free to react with ozone disintegrating it into $O_2 + O$



iv) In humans, it causes damage to DNA & mutations arise & also cause ageing of skin, damage to skin & skin cancer. In plants, it causes injury, premature death of plants & reduced growth & yield.

