

7. ECOLOGY AND BIODIVERSITY

1VSAQ+1SAQ+1LAQ [2M + 4M + 8M] = 14 MARKS

FRUIT POINTS

1. Environment is the major factor for the evolution and continuation of life.
2. Ecology is the study of environment and its habitants.
3. Living being cannot survive without energy.
4. Solar energy is the primary source of energy for all the living forms either directly or indirectly.
5. Capture and storing of energy by chlorophyll is the major step in evolution.
6. Ozone is beneficial when it is in the outer layer of atmosphere. It protects the life from UV rays of Sun. It is dangerous when it is close to the earth.
7. Pollutants are there since the beginning of earth, but they are balanced by non-pollutants.
8. Man is solely responsible for fitting the balance towards pollutants and may be responsible for his own extinction unless remedial steps are taken.
9. UV rays kill micro organisms. UV rays convert the sterols in the skin to vitamin D. [IPE]
10. Mutualism is a type of interaction between different species in which both are benefited.
Ex: Bees and flowering plant. [IPE]
11. **Summer Stratification:** During summer in temperate lakes, the formation of three layers of water is called Summer stratification. [IPE]
12. DFC is detritus food chain. It is an important food chain in terrestrial ecosystem. Detritus is formed from leaf litter, dead bodies, and faeces of animals. [IPE]
13. **Green house effect:** 'Green house effect' is a naturally occurring phenomenon, that is responsible for heating of the Earth's surface and atmosphere. [IPE]
14. **Global Warming:** Rise of temperature above normal level in the atmosphere is called global warming. This happens due to the increase in the emission of green house gases. [IPE]
15. **Lake Ecosystem zones:** (I) Littoral zone (II) Limnetic zone (III) Profundal zone. [IPE]
16. **Food chains of Ecosystem:** [IPE]
1. Grazing food chain 2. Parasite food chain 3. Detritus food chain
17. **Major air pollutants:** 1. Carbon monoxide 2. Carbon dioxide 3. Sulphur dioxide 4. Nitrogen oxides 5. Aerosols 6. Noise pollution. [IPE]
18. National Aquatic Animal of India is **River dolphin**. [NEET-2016]
19. The principle of competitive exclusion was stated by **G.F. Gause**. [NEET-2016]
20. The upright pyramid of number is absent in **forest**. [2012 PMT]
21. **Stratification** is not a functional unit of an ecosystem. [2012 PMT]
22. About 70% of total global carbon is found in **oceans**. [2008 PMT]

23. The highest DDT concentration in aquatic food chain shall occur in **seagull**. [NEET-2016]
24. A lake which is rich in organic waste may result in **mortality of fish due to lack of oxygen**. [NEET-2016]
25. Biochemical Oxygen Demand (BOD) may not be a good index for pollution for water bodies receiving effluents from **petroleum industry**. [NEET-2016]
26. Depletion of **Ozone** gas in the atmosphere can lead to an increased incidence of skin Cancers [NEET-2016]
27. Increase in concentration of the toxicant at successive trophic levels is known as **biomagnification**. [NEET-2015]
28. **Lichens** are most suitable indicators of SO₂ pollution in the environment. [NEET-2015]
29. Eutrophication of water bodies leading to killing of fishes is mainly due to non-availability of **oxygen**. [NEET-2015]
30. Acid rain is caused by increase in the atmospheric concentration of **SO₂,NO₂**. [NEET-2015]
31. Ozone layer is present in **stratosphere**. [NEET-2014]
32. Global warming can be controlled by **reducing deforestation, cutting down use of fossil fuel**. [NEET-2013]
33. Number of hotspots of biodiversity in the world have been identified till date by Norman Myers is **34**. [NEET-2016]
34. Kyoto protocol was endorsed at **CoP-3**. [NEET-2013]
35. The region of biosphere reserve which is legally protected and where no human activity is allowed is known as **core zone**. [NEET-2017]
36. **Thiobacillus** is a group of bacteria helpful in carrying out **Denitrification**. [NEET-2019]
37. Gases mainly responsible for green house effect are Carbondioxide & Methane [NEET-2019]
38. The most suitable method for **disposal of nuclear waste** is 'burying the waste within rocks and deep below the earth's surface'. [NEET-2019]
39. **Polyblend**, a fine powder of recycled modified plastic, has proved to be a good material for **construction of roads**. [NEET-2019]
40. The protocol that aimed for reducing emission of chlorofluorocarbons in the atmosphere is **Montreal protocol** [NEET-2019]
41. **Group of biocontrol agents**: Trichoderma, Baculovirus, Bacillus Thuringiensis [NEET-2019]
42. Equipment that is essentially required for growing microbes on a large scale, for industrial production of enzymes is **Bioreactor**. [NEET-2019]
43. The amount of nutrients, such as carbon, nitrogen, phosphorus and calcium present in the soil at any given time, is referred as **standing state**. [NEET-2021]
44. Electrostatic precipitator can remove particulate matter present in the exhaust from a thermal power plant. [NEET-2022]
45. In an ecosystem the equation $GPP - R = NPP$, R indicates Respiratory loss. [NEET-2023]