

1. Nature's harmony refers to:
 - a) Fighting in nature
 - b) Living and non-living things working together
 - c) Only plants growing well
 - d) Only animals surviving
2. Biotic components are:
 - a) Soil and water
 - b) Sunlight and air
 - c) Plants, animals, humans
 - d) Rocks and sand
3. Abiotic components are:
 - a) Plants and fungi
 - b) Bacteria and animals
 - c) Air, water, sunlight, soil
 - d) Trees and grass
4. The correct sequence in a food chain is:
 - a) Eagle → Snake → Frog → Grasshopper → Plant
 - b) Plant → Grasshopper → Frog → Snake → Eagle
 - c) Grasshopper → Plant → Snake → Frog → Eagle
 - d) Plant → Frog → Grasshopper → Snake → Eagle
5. Many food chains linked together form:
 - a) Food web
 - b) Food circle
 - c) Food link
 - d) Food cycle
6. Producers make food using:
 - a) Soil nutrients
 - b) Sunlight
 - c) Carbon dioxide only
 - d) Water only
7. Consumers are organisms that:
 - a) Produce their own food
 - b) Depend on other organisms for food
 - c) Break down dead matter
 - d) Provide oxygen
8. Decomposers return nutrients to:
 - a) Sunlight
 - b) Soil
 - c) Water
 - d) Air
9. Which of these is a decomposer?
 - a) Grasshopper

- b) Eagle
 - c) Fungi
 - d) Snake
- 10.** Which group keeps nature in balance?
- a) Only producers and consumers
 - b) Only consumers and decomposers
 - c) Producers, consumers, decomposers
 - d) Only producers
- 11.** Plants depend on animals for:
- a) Food
 - b) Oxygen
 - c) Carbon dioxide and seed dispersal
 - d) Water
- 12.** Animals depend on plants for:
- a) Carbon dioxide and food
 - b) Oxygen and food
 - c) Shelter only
 - d) Heat and shelter
- 13.** Which of these destroys harmony?
- a) Planting trees
 - b) Deforestation
 - c) Recycling
 - d) Saving water
- 14.** Hunting and poaching harm:
- a) Soil
 - b) Wildlife
 - c) Water
 - d) Air
- 15.** Climate change is caused by:
- a) Recycling
 - b) Planting trees
 - c) Pollution and deforestation
 - d) Saving energy
- 16.** Recycling helps to:
- a) Increase pollution
 - b) Reduce waste
 - c) Hunt animals
 - d) Cut down trees
- 17.** The term 'ecosystem' means:
- a) Living and non-living things working separately
 - b) A system where living and non-living things work together

- c) Only plants and animals living together
d) None of the above
18. Balance in nature means:
a) All parts work smoothly together
b) Plants growing faster than animals
c) More animals than plants
d) Humans controlling all resources
19. Protecting wildlife helps to:
a) Destroy harmony
b) Maintain balance in nature
c) Increase pollution
d) Increase hunting
20. Avoiding plastic helps to:
a) Increase soil pollution
b) Reduce pollution
c) Harm marine life
d) Cut down trees

Assertion–Reason Questions

(Options: A – Both A and R are true, and R explains A; B – Both A and R are true, but R is not the explanation; C – A is true, R is false; D – A is false, R is true)

21. A: Producers make their own food.
R: They use sunlight to produce food through photosynthesis.
22. A: Decomposers clean the environment.
R: They break down dead plants and animals into nutrients.
23. A: A food web is weaker than a single food chain.
R: A food web has many links that make ecosystems more stable.
24. A: Animals give oxygen to plants.
R: Animals produce carbon dioxide, which plants use.
25. A: Deforestation helps maintain harmony in nature.
R: Cutting trees destroys habitats and increases pollution.

Case Study-Based Questions

Case Study 1 – Forest Ecosystem

A forest has plants, deer, tigers, and decomposers like fungi. Due to illegal hunting, the tiger population decreased.

- a) How will the deer population change?

- b) What will happen to plants if deer population increases too much?
- c) Which group of organisms will break down dead animals?
- d) How does hunting affect harmony in the forest?

Case Study 2 – Pollution in a Lake

A lake is home to fish, plants, and birds. A nearby factory releases waste into the water.

- a) Which components are affected first – biotic or abiotic?
- b) How will fish be affected?
- c) What might happen to birds depending on fish?
- d) Suggest one way to restore balance in this ecosystem.

