



INDIAN SCHOOL NIZWA
CLASS X- SCIENCE – CH-13 REVISION WORK SHEET

1. **Q1: Which of the following groups do not constitute a food chain?**
 - (i) Wolf, rabbit, grass, lion
 - (ii) Plankton, man, grasshopper, fish
 - (iii) Hawk, grass, snake, grasshopper, frog
 - (iv) Grass, snake, wolf, tiger
 - (a) (i) and (iv)
 - (b) (i) and (iii)
 - (c) (ii) and (iii)
 - (d) (ii) and (iv)
2. **Q2: The percentage of solar energy which is not converted into food energy by the leaves of green plants in a terrestrial ecosystem is about:**
 - (a) 1%
 - (b) 10%
 - (c) 90%
 - (d) 99%
3. **Q3: Assertion (A): The amount of ozone in the atmosphere began to drop sharply in the 1980s. Reason (R): The oxygen atoms combine with molecular oxygen to form ozone.**
4. **: Assertion (A): Animals will not get energy if they eat (consume) coal as food. Reason (R): Specific enzymes are needed for the breakdown of a particular food.**
5. **Q4: "Excessive use of chemicals and pesticides in agriculture adversely affects the environment." Justify this statement.**
6. **Q7: Write the essential function performed by ozone at the higher levels of the atmosphere. How is it formed in the upper atmosphere? Write the name of the group of chemicals mainly responsible for the depletion of ozone layer.**
7. **Q8: Some harmful chemicals get accumulated in human bodies through the food chain. Name this phenomenon. Explain the reason for the maximum concentration of these chemicals found in our bodies.**

8.

Q9: Other than the abiotic components, which of the given biotic components are not required to make an aquarium with small herbivorous fishes a self-sustaining system?

(i) Aquatic plants and aquatic animals

(ii) Terrestrial plants and terrestrial animals

(iii) Decomposers as bacteria and fungi

(iv) Consumers as clown fishes and sea urchins

(a) (i) and (iv)

(b) (ii) and (iii)

(c) (i) and (iii)

(d) (ii) and (iv)

9.

Q10: Assertion (A): Use of jute bags for shopping reduces pollution. Reason (R): Jute is biodegradable and its bag may be reused as and when needed.

10.

Q11: (a) "In a food chain energy flow is unidirectional." Give two reasons for the given statement. (b) If 10,000 J energy is available at the producer level, how much energy will be available to the secondary consumers? Give reason to justify your answer.

11.

Q12: In the food chains given below, select the most efficient food chain in terms of energy.

(a) Grass → Grasshopper → Frog → Snake

(b) Plants → Deer → Lion

(c) Plants → Man

(d) Phytoplankton → Zooplankton → Small Fish → Big Fish

12.

Q14: What are decomposers? Give two examples. State how they maintain a balance in an ecosystem.

13.

Q17: (a) Why are the organisms of first trophic level important in any food chain? (b) Justify the following statement: 'The flow of energy in an ecosystem is unidirectional.'

14.

Q12: Differentiate between food chain and food web. In a food chain consisting of deer, grass and tiger, if the population of deer decreases, what will happen to the population of organisms belonging to the first and third trophic levels? (3 Marks) (2024)

15.

Q3: "Although gardens are created by man but they are considered to be an ecosystem." Justify this statement. (2 Marks) (2023)

16.

Q6: (A) Why does a kitchen garden called an artificial ecosystem while a forest is considered to be a natural ecosystem?

(B) While designing an artificial ecosystem at home, write any two things to be kept in mind to convert it into a self-sustaining system. Give reason to justify your answer. (3 Marks) (CBSE 2023)