

ANSWERS FOR TOPICAL REVIEW 12

Chapter 12: Interactions Within Ecosystems

Section A: Multiple-Choice Questions (MCQs) – 2 marks

1	2
C	B

Section B: Structured Questions – 13 marks

Qn	Answer	Remarks
1	• Light [1] • Temperature [1] • Water [1]	
2	Potential predators mistake the non-poisonous frogs for the poison-arrow frogs because of their similar colouring. Hence, the non-poisonous frogs avoid being eaten by predators.	1 mark.
3	The plants need sunlight for photosynthesis. If the water is too deep, the sunlight may not be able to penetrate through the water to reach the submerged water plants.	1 mark.
4	Mutualism Plants provide dead leaves as food to the earthworms. In return, the earthworm's burrowing makes air and water more readily available to the roots of the plants. Plants need air and water to survive.	1 mark.
5	Producers [1] The total energy level decreases along the food chain. Since producers are at the beginning of the food chain, they have the largest amount of energy to support the large number of predators. Therefore, they would exist in the largest number. [1]	
6a	Grass makes its own food through photosynthesis. Grass uses carbon dioxide and water for this process.	1 mark.
6b	Parasitism. Rabbits are the host and fleas are the parasites.	1 mark.
6c	The wildcats compete with the foxes for their source of food. Wildcats feed on rabbits as well as on mice. The foxes will have to feed on more rabbits to survive.	1 mark.
7a	Bacteria	1 mark.
7b	Bacteria break down the complex nutrients in faeces and dead bodies of plants and animals and return them to the environment.	1 mark.