

Chapter - 15

Our Environment

(Assertion and Reasoning Questions)

Each of these questions contains an assertion followed by reason. Read them carefully and answer the question on the basis of following options. You have to select the one that best describes the two statements.

- (a)** If both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
- (b)** If both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
- (c)** If Assertion is correct but Reason is incorrect.
- (d)** If Assertion is incorrect but Reason is correct.

Q.1. Assertion (A) : In an ecosystem, the function of producers is to convert organic compounds into inorganic compounds.

Reason (R) : Green plants, the producers, transduce solar energy.

Q.2. Assertion (A) : Ecology is study of relationship between living organisms and their environment.

Reason (R) : The biotic community and non-living environment of an area function together to form an ecosystem.

Q.3. Assertion (A) : Animals adopt different strategies to survive in hostile environment.

Reason (R) : Praying mantis is green in colour which merges with plant foliage.

Q.4. Assertion (A) : Abiotic component of an ecosystem involves cycling of material and flow of energy.

Reason (R) : This is essential to keep biotic factors alive.

Q.5. Assertion (A) : The crown fires are most destructive as they burn the tree top.

Reason (R) : Due to crown fire, the temperature of that area may rise up to 700°C.

Q.6. Assertion (A) : Trophic levels are formed by only plants.

Reason (R) : Food chains and webs are formed due to linked organisms on the basis of their nutrition.

Q.7. Assertion (A) : A network of food chains existing together in an ecosystem is known as food web.

Reason (R) : An animal like kite cannot be a part of a food web.

Q.8. Assertion (A) : Supersonic jets cause pollution as they thin out ozone.

Reason (R) : Depletion of ozone causes green house effect.

Q.9. Assertion (A) : Tropical rain forests are disappearing fast from developing countries such as India.

Reason (R) : No value is attached to these forests because these are poor in biodiversity.

-X-X-X-

ANSWER KEY

Q.1. (a)

Q.2. (a)

Q.3. (a) Animals blend with the surroundings or background to remain unnoticed for protection and aggression.

Q.4. (a)

Q.5. (a)

Q.6. (d)

Q.7. (c) In the food web, different food chains are interconnected. Each chain consists of different trophic levels i.e., producers, consumers and detritivores. So, kite can also be a part of food web.

Q.8. (a)

Q.9. (c) Tropical rain forests have disappeared mainly due to man's activities. Due to over population in countries like India, rain forests are cut to make place available for man to live and build houses. To build buildings and factories man has incessantly cut down trees. This has caused the depletion of rain forests.