

Chapter – 11 | Organisms and Populations

QUIZ
PART-03

1. Darwinian fitness refers to the ability of populations to develop their:
- A. Feeding behavior
 - B. Reproductive fitness
 - C. Body size
 - D. Migration ability (B)

Explanation : Darwinian fitness is related to the development of reproductive fitness to attain the highest level of development in a habitat.

2. Organisms under selection pressure evolve towards:
- A. The largest body size
 - B. The most efficient reproductive strategy
 - C. The longest lifespan
 - D. The fastest movement (B)

Explanation : Selection pressure helps organisms evolve towards the most efficient reproductive strategy.

3. Which organism reproduces only once during its lifetime?
- A. Most mammals
 - B. Most birds
 - C. Pacific salmon fish
 - D. Humans (C)

Explanation : Pacific salmon fish and bamboo are examples of organisms that reproduce only once in their lifetime.

4. Organisms producing a very large number of small-sized offspring include:
- A. Birds and mammals
 - B. Oysters and pelagic fishes
 - C. Humans and elephants
 - D. Reptiles only (B)

Explanation : Oysters and pelagic fishes produce a very large number of small-sized offspring.

5. Life history traits of organisms have evolved according to restrictions imposed by:
- A. Only climate
 - B. Only food availability
 - C. Abiotic and biotic components of habitat
 - D. Only predators (C)

Explanation : Life history traits evolve in relation to restrictions imposed by abiotic and biotic components of the habitat.

6. Interspecific interactions occur between populations of:
- A. The same species
 - B. Two different species
 - C. Only plants
 - D. Only animals (B)

Explanation : Interspecific interactions arise from interactions between populations of two different species.

7. Which population interaction is represented by (+/+)?
- A. Competition
 - B. Predation
 - C. Mutualism
 - D. Amensalism (C)

Explanation : In mutualism, both species are benefited, so it is represented by (+/+).

8. In predation, which organism is benefited?
- A. Prey
 - B. Predator
 - C. Both predator and prey
 - D. Neither organism (B)

Explanation : In predation, the predator gets benefit while the prey is harmed.

9. Predators help maintain ecosystem stability by:
- A. Increasing prey population unlimitedly
 - B. Keeping prey populations under control
 - C. Eliminating all prey species
 - D. Stopping energy transfer (B)

Explanation : Predators control prey populations and help maintain ecological balance.

10. Exotic species become invasive mainly because:
- A. They have many natural predators
 - B. Their natural predators are absent in new areas
 - C. They cannot reproduce
 - D. They stop spreading (B)

Explanation : Exotic species spread rapidly in new areas because their natural predators are absent there.