

Chapter 2 Evolution

1. Which of the following statements are included in the inductions and deductions of Darwinism?
 - (A) The prodigality or reproduction is very important since over crowdedness results in struggle for existence
 - (B) In the struggle for existence the organisms with variation in structure habits or instincts may be better adapted to new conditions and will have better chance of survival
 - (C) Natural selection operates amongst the fittest and the new forms are established leading to speciation
 - (D) There is no organism without genotype. The genotype should be changed to give an efficient organism

2. In theories of evolution, the example that a giraffe stretching the neck to reach on higher branches has been used to explain the following
 - (A) use theory
 - (B) the concept of inheritance of acquired characters
 - (C) intelligent design
 - (D) disuse theory

3. Which of the following explain the term “survival of the fittest”?
 - (A) Fittest animals leave higher number of progeny than those which perish
 - (B) Fittest group of animals out populates its competitors
 - (C) Fittest animals are best predators
 - (D) Fittest group is rich in genetic variations

4. Which of the following statements are part of the classical Darwinian theory of evolution by natural selection?
 - (A) A trait which is constantly used will get inherited by next generation
 - (B) Phenotypic variations exist among the individuals of a population of a species
 - (C) Individuals that best fit into a given environment are more likely to survive
 - (D) Each population can randomly acquire a distinct and separate suite of variations

5. Which of the following factors contribute to “allopatric speciation”?
 - (A) The isolated population is exposed to different selection pressure as compared to parent population
 - (B) A population becomes geographically isolated from the parent population
 - (C) There is a gene flow between the two separated populations
 - (D) Genetic drift occurs between the two separated populations

6. Lamarck’s theory of evolution explains
 - (A) Indian women have been getting their ear pierced for thousands of years but not a single baby with pierced ear is born
 - (B) giraffes have long legs because they have to eat leaves from the tall trees on their habitat
 - (C) deers have the capacity to escape from agile Enemies because these can run very fast
 - (D) high altitude Pines have branches with slope down so thatsnow fails to collect up on them in winter

7. Darwinism explains
 - (A) mimicry

- (B) adaptation
 - (C) struggle for existence
 - (D) tusks of elephants
8. Wild mustard has given rise to several types of vegetables through
- (A) natural selection
 - (B) artificial selection
 - (C) selective breeding
 - (D) line breeding
9. Which of the following are homothermic animals.
- (A) Pigeon
 - (B) Lizard
 - (C) Frog
 - (D) Platypus
10. Which of the following are CORRECT match of evolutionary biologists with their respective theory.
- (A) August Weisman – Germ plasm theory
 - (B) Jean-Baptiste Lamarck – Inheritance of acquired characteristics
 - (C) Amotz Zahavi – Handicap Principle
 - (D) Motoo Kimura – Theory of descent with modification

Answer

- 1. (A), (B), (C)
- 2. (A), (B), (D)
- 3. (B), (C), (D)
- 4. (B), (C), (D)
- 5. (A), (B), (D)
- 6. (B), (C), (D)
- 7. (A), (B), (C)
- 8. (B), (C)
- 9. (A), (D)
- 10. (A), (B), (C)