



Mentor Guru

Class 12 – Biology

Chapter 6 – Evolution

Very Short types question with answer

Q.1. List the characteristics of fossils.

A.1. The characteristics of fossils are mentioned below:

- Fossils provide a connecting link between different species.
- They help in identifying the time period when they existed.
- They represent modes of preservation of different ancient species.
- They helped in identifying the evolutionary traits of the organisms and their ancestors.

Q.2. How is the age of living tree estimated?

A.2. The age of the living tree can be calculated by counting the annual rings on the wood growth.

Q.3. Name the process to estimate the age of a fossil.

A.3. The age of a fossil is determined by carbon dating.

Q.4. What is the pre-condition for adaptive radiation?

A.4. The pre-condition for adaptive radiation is forming physical and geographical barriers between the population of the same species.

Q.5. How is the age of rock estimated?

A.5. The age of the rock is estimated by measuring the amount of certain radioactive elements in the rock. The age of the rock is known as the absolute age.

Q.6. What is the founder effect?

A.6. The founder effect is a type of genetic drift which occurs when a few individuals in a population separate from the original population and form a colony. The genetic diversity of this new population will not be the same as that of the original population. This is a gradual process.

Q.7. What is the bottleneck effect?

A.7. The bottleneck effect is a type of genetic drift that occurs when the size of a population is severely reduced due to events such as earthquakes, epidemics, floods, fire, etc. In this process, a large number of organisms are deceased leaving behind only a handful of the population. Now, the genetic diversity of the surviving population becomes the genetic diversity of the entire population.

Q.8. What is natural selection?

A.8. Natural selection is the process in which the survival and reproductive rate of individuals with certain characteristics are greater than that of the other individuals in a population. This process leads to an evolutionary change.

Q.9. What are the factors affecting the Hardy-Weinberg equilibrium?

A.9. The factors affecting the Hardy-Weinberg equilibrium are:

- Genetic Recombination
- Gene Flow
- Genetic Drift
- Natural Selection
- Mutation

Q.10. What are the various stages of evolution?

A.10. There are seven stages in human evolution:

1. Dryopithecus
2. Ramapithecus
3. Australopithecus
4. Homo Erectus

5. Homo Sapiens Neanderthalensis

6. Homo Sapiens Sapiens



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