

Chapter – 6 | Evolution

QUIZ-01

1. The Big Bang theory explains the origin of:

- A. Life
B. Universe
C. Fossils
D. Species (B)

Explanation : The Big Bang theory explains the origin and expansion of the universe.

2. The theory that life comes only from pre-existing life was supported by:

- A. Darwin
B. Lamarck
C. Louis Pasteur
D. Hugo de Vries (C)

Explanation : Louis Pasteur disproved spontaneous generation and showed that life arises from pre-existing life.

3. Miller's experiment produced:

- A. Amino acids
B. DNA directly
C. Living cells
D. Fossils (A)

Explanation : S.L. Miller created early earth-like conditions and observed the formation of amino acids.

4. Darwin proposed evolution mainly through:

- A. Use and disuse of organs
B. Natural selection
C. Sudden large mutations only
D. Spontaneous generation (B)

Explanation : Darwin explained evolution through natural selection, where better-adapted organisms survive and reproduce more.

5. Fossils provide which type of evidence for evolution?

- A. Embryological evidence
B. Paleontological evidence
C. Biochemical evidence
D. Anatomical evidence only (B)

Explanation : Fossils found in different rock layers provide paleontological evidence of evolution.

6. The forelimbs of whale, bat, cheetah and human are examples of:

- A. Analogous organs
B. Homologous organs
C. Vestigial organs
D. Artificial selection (B)

Explanation : These forelimbs have similar basic structure but perform different functions, showing divergent evolution.

7. Wings of butterfly and birds are examples of:

- A. Homologous organs
B. Analogous organs
C. Fossil organs
D. Rudimentary organs (B)

Explanation : They perform the same function but have different anatomical origins, showing convergent evolution.

8. Darwin's finches are a classic example of:

- A. Adaptive radiation
B. Genetic drift only
C. Spontaneous generation
D. Stabilising selection (A)

Explanation : Different finches evolved from a common ancestor into different forms with different beaks.

9. According to Hardy-Weinberg principle, the sum total of all allelic frequencies is:

- A. 0
B. 1
C. 2
D. 100 (B)

Explanation : In genetic equilibrium, the total allelic frequency of a population is always 1.

10. Homo habilis had a brain capacity of about:

- A. 300–400 cc
B. 650–800 cc
C. 900 cc
D. 1400 cc (B)

Explanation : The chapter states that Homo habilis had brain capacities between 650–800 cc.