

Chapter – 6 | Evolution

QUIZ PART-01

1. Evolutionary biology is the study of:

- A. Only fossils
- B. History of life forms on Earth
- C. Human anatomy only
- D. Plant classification only (B)

Explanation : Evolutionary biology deals with the history of life forms and their changes over time on Earth.

2. The approximate age of the universe is:

- A. 4.5 billion years
- B. 10 billion years
- C. 13.8 billion years
- D. 20 billion years (C)

Explanation : According to the chapter, the universe is approximately 13.8 billion years old.

3. The origin of the universe is explained by:

- A. Special creation theory
- B. Big Bang theory
- C. Natural selection theory
- D. Abiogenesis theory (B)

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

4. The Earth was formed approximately:

- A. 500 million years ago
- B. 1 billion years ago
- C. 4.5 billion years ago
- D. 13.8 billion years ago (C)

Explanation : The Earth is believed to have formed about 4.5 billion years ago.

5. According to the Pan-spermia theory, life came to Earth in the form of:

- A. Proteins
- B. Spores
- C. Cells
- D. Fossils (B)

Explanation : Early Greek thinkers believed that units of life called spores migrated from other planets to Earth.

6. The theory stating that life emerged from decaying and rotting materials is:

- A. Chemical evolution theory
- B. Spontaneous generation theory
- C. Natural selection theory
- D. Special creation theory (B)

Explanation : The spontaneous generation theory proposed that life could arise from non-living decaying materials.

7. Louis Pasteur proved that:

- A. Life originated from chemicals
- B. Life emerges from pre-existing life
- C. Life came from outer space
- D. Earth is 4000 years old (B)

Explanation : Pasteur's swan-neck flask experiment showed that organisms arise from pre-existing life.

8. The chemical theory of origin of life was proposed by:

- A. Darwin and Wallace
- B. Oparin and Haldane
- C. Miller and Pasteur
- D. Watson and Crick (B)

Explanation : Oparin (Russia) and Haldane (England) proposed that life originated from non-living organic molecules.

9. Miller's experiment demonstrated the formation of:

- A. DNA
- B. Proteins only
- C. Amino acids
- D. Living cells (C)

Explanation : S. L. Miller showed that amino acids could form under simulated early Earth conditions.

10. The theory that explains the origin of life from non-living matter is:

- A. Panspermia
- B. Abiogenesis
- C. Natural selection
- D. Mutation theory (B)

Explanation : Abiogenesis refers to the origin of life from non-living matter and is widely accepted.