

(6 pages)

Reg. No. :

**Code No. : 30704 E Sub. Code : JMZO 61/
SMZO 61**

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2021.

Sixth Semester

Zoology — Main

EVOLUTION

(For those who joined in July 2016 onwards)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer.

1. Life originated about _____ million years ago.
(a) 325 (b) 425
(c) 2000 (d) 3000

2. Palaeontology deals with?
 - (a) Ontology (b) Fossils
 - (c) Taxonomy (d) Phylogeny
3. Ancon sheep is an example for the theory of
 - (a) Natural selection (b) Mutation
 - (c) Pangenesis (d) None
4. The organisms provided with favourable variations succeed in the struggle for existence was stated by whom?
 - (a) Henslon (b) Lamarck
 - (c) Darwin (d) Thales
5. Who described genetic drift?
 - (a) Summer (b) Devenport
 - (c) Mayor (d) Sewall wright
6. Allogenuous transformation is caused by
 - (a) Mutation
 - (b) Natural selection
 - (c) Chromosomal aberration
 - (d) Hybridization

7. Stick insect belongs to which type of mimicry?
- (a) Protective mimicry
 - (b) Warning mimicry
 - (c) Aggressive mimicry
 - (d) All
8. Echidna belongs to which form?
- (a) Aquatic (b) Arboreal
 - (c) Fossorial (d) Volant
9. Evolution of horse started in the era
- (a) Coenozoic (b) Palaeozoic
 - (c) Mesozoic (d) Archaeozoic
10. Sphenodon belongs to which pattern of distribution?
- (a) Continuous (b) Discontinuous
 - (c) Bipolar (d) Isolated

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Write the experimental evidence for the chemical origin of life.

Or

- (b) Write the comparison between homologous and analogous structures.

12. (a) Give notes on industrial melanism.

Or

- (b) Write Neo-Lamarckism with any two examples.

13. (a) Give an account on genetic drift.

Or

- (b) Write the significance of Hardy-Weinberg law.

14. (a) Write the significance of counter shading in Shark.

Or

- (b) Write the adaptations of desert and cave animals.

15. (a) Give notes on modern horse.

Or

- (b) Write the salient features of Ape.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the embryological evidences in favour of evolution.

Or

- (b) Elaborately discuss mesozoic era.

17. (a) Write the use and disuse theory of Lamarck.

Or

- (b) Explain the natural selection theory of Darwin.

18. (a) Write an essay on premating isolation.

Or

(b) Briefly explain species concept.

19. (a) Write the classification of mimicry.

Or

(b) Explain the adaptations of cursorial, arboreal and volant forms.

20. (a) Write elaborately the cultural evolution of man.

Or

(b) Define zoogeography. Explain the oriental and Australian region.
