

(6 Pages)

Reg. No. : _____

Code No. : 20254 E Sub. Code : SMZO 61/
AMZO 61

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023

Sixth Semester

Zoology — Core

EVOLUTION

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. The _____ is called as age of fish.
- (a) Pennisylvanian period
 - (b) Devonian period
 - (c) Permian period
 - (d) All the above

2. The mutation theory was proposed by _____
- (a) De vries (b) Mendel
 - (c) Pasteur (d) Dobzansky
3. A new, modified theory of Lamarckism is called _____
- (a) neo Darwinism (b) Darwinism
 - (c) neo lamarkism (d) lamarkism
4. The neo Darwinism was proposed by _____
- (a) August Weismann
 - (b) Wallace
 - (c) Fisher
 - (d) Kettlewell
5. The raw material for the evolution is _____
- (a) Variation (b) Adaptation
 - (c) Colouration (d) Isolation
6. When the species becomes fragmented by polyploidy _____ speciation occurs.
- (a) sympatric (b) allopatric
 - (c) true (d) phyletic

Page 2 Code No. : 20254 E

7. Counter shading mechanism is a _____
- (a) protective colouration
 - (b) alluring colouration
 - (c) warning colouration
 - (d) none
8. The organism which exhibits mimicry is called _____
- (a) model (b) mimic
 - (c) adaptation (d) selection
9. The first true man was _____
- (a) Homo sapiens
 - (b) Homo erectus
 - (c) Neanderthal man
 - (d) Cro magnon man
10. The palaeartic, nearctic, ethiopian and oriental regions are together called _____
- (a) metagea (b) neogea
 - (c) notogea (d) holarctic

Page 3 Code No. : 20254 E

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Define analogous organs with suitable examples.
Or
(b) Enumerate on mesozoic era.
12. (a) Explain the natural selection theory.
Or
(b) Discuss the criticism of Lamarckism.
13. (a) Write down the geographical isolation.
Or
(b) Explain the Hardy Weinberg law.
14. (a) Organize the warning mimicry.
Or
(b) Illustrate the arboreal adaptation.
15. (a) Persuade the salient features of neotropical region.
Or
(b) Orderly arrange the causes for human evolution.

Page 4 Code No. : 20254 E

[P.T.O.]

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Enumerate the paleontological evidences.

Or

- (b) Describe the homologous organs with examples.

17. (a) Discuss the Lamarckian principles.

Or

- (b) Summarize the natural selection and types.

18. (a) Explain the sources of variations.

Or

- (b) Illustrate the seasonal isolation and ecological isolations.

19. (a) Explain the different types of mimicry.

Or

- (b) Explain the adaptations found in the desert animal.

20. (a) Summarize the characteristics of Australian region.

Or

- (b) Discuss the evolution of man as seen in fossil record.