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Code No.: 20390 E

Sub. Code: AMZO 51

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

Fifth Semester

Zoology — Core

ECOLOGY AND TOXICOLOGY

(For those who joined in July 2020 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- 1. The organisms synthesize the food from the abiotic factors
 - (a) Decomposers
- (b) Consumers
- (c) Parasites
- (d) Producers
- 2. The basic functional unit of an environment is
 - (a) ecosystem
- (b) biotic factor
- (c) abiotic factor
- (d) tropic level
- 8. The following animal is killed for drugs
 - (a) Goat
- (b) Deer ·
- (c) Varanus
- (d) Turtle
- 9. The example of synthetic poison is
 - (a) Snake venom
- (b) Fish venom
- (c) Pesticides
- (d) Botulinum
- 10. The toxin produced by fungi is
 - (a) Mycotoxin
- (b) Cicutoxin
- (c) Ergotoxin
- (d) Zootoxin

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions choosing either (a) or (b). Each answer should not exceed 250 words.

 (a) List down the adaptations developed in animal escape from the extreme temperature.

Or

(b) Explain the role of producers and consumers in the ecosystem.

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- 3. Each steps of the food chain is called
 - (a) Food web
-) Producers
- (c) Consumers
- d) Trophic level
- 4. In animal relationship one partner is harmed in
 - (a) Antibiosis
-) Predation
- (c) Parasitism
- d) Competition
- The average number of new individuals produced by a population in a given time
 - (a) Growth
- (b) Natality
- (c) Mortality
- (d) Dispersal
- The intermediate zone lying between adjacent community is
 - (a) niche
- (b) stratification
- (c) ecotone
- (d) succession
- Kaziranga national park is famous for
 - (a) Elephant
- (b) Snakes
- (c) Lion
- (d) Rhinoceros

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(a) Describe the ecological pyramid.

'Or

- (b) Describe commensalism with example.
- 13. (a) Write short note on population density.

Or

- (b) Briefly explain the ecological succession.
- 14. (a) Explain the measures taken from the conservation of wildlife.

Or

- (b) Discuss the application of remote sensing in agriculture.
- 15. (a) List the harmful effect of toxicant on public health.

Or

(b) List out the harmful effects of pesticides.

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PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions choosing either (a) or (b). Each answer should not exceed 600 words.

16. (a) Write an essay on biological effects of light on organisms.

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- (b) Write an essay on pond ecosystem.
- 17. (a) What is ecological pyramid and explain the importance and types of an ecological pyramid.

Or

- (b) Briefly explain the classifications of the animal relationships.
- 18. (a) Give brief account on the characters of population ecology.

Or

- (b) Explain various adaptations seen in desert animals for the conservation of water.
- 19. (a) Explain the necessity and methods of wildlife conservation.

Or

(b) Give an account of urbanization.

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20. (a) Write an essay on toxicity of heavy metals and its effect.

Or

(b) Give an account on the types of environmental toxicology.

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