

(6 pages)

Reg. No. :

Code No. :7187

Sub. Code :PZOM 22

M.Sc. (CBCS) DEGREE EXAMINATION,
APRIL 2019.

Second Semester

Zoology — Core

ENVIRONMENTAL BIOLOGY AND BIODIVERSITY

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The cyclical path of elements from the environment to biotic system and back is called
 - (a) Biotic phase
 - (b) Abiotic phase
 - (c) Energy flow
 - (d) Bio-geochemical cycle

2. The process of orderly and progressive replacement of one community by another in an area is called
 - (a) Ecological pyramid
 - (b) Ecological succession
 - (c) Ecological niche
 - (d) all the above
3. The problem of excessive nutrient load in water bodies is called
 - (a) Water pollution
 - (b) Eutrophication
 - (c) COD
 - (d) BOD
4. The amount of oxygen required for chemical oxidation of organic matter and other reducing agents present in waste water is called
 - (a) BOD
 - (b) COD
 - (c) CFC
 - (d) CO₂
5. The tree hugging movement for the conservation of forest is
 - (a) Reforestation
 - (b) Deforestation
 - (c) Chipko movement
 - (d) None

Page 2

Code No. : 7187



6. Which country is the pioneer in wind energy?
 (a) Denmark (b) Australia
 (c) America (d) Africa
7. _____ is a catalogue of taxa prepared by IUCN that face risk of extinction.
 (a) Hot spot (b) Gene bank
 (c) Gene library (d) Red list
8. The totality of all inherited genetic variation within a population is
 (a) Species diversity
 (b) Genetic diversity
 (c) Ecosystem diversity
 (d) Biodiversity
9. Conservation method that provides protection to total ecosystem through a net work of protected areas is
 (a) In-situ (b) Ex-situ
 (c) Sanctuary (d) Biosphere reserve
10. The geographical area rich in plant and animal species, of which many are
 (a) Sanctuary (b) Zoological Park
 (c) Hot spots (d) Biosphere reserve

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write short notes on energy flow in an ecosystem.

Or

- (b) Explain Nitrogen cycle with a diagram.

12. (a) Narrate the ecological effect of acid rain.

Or

- (b) Give an account on solid waste management.

13. (a) List out the reasons for conservation of natural resources.

Or

- (b) Discuss the distribution of water resources in India.

14. (a) Give your opinion on man-wildlife conflicts.

Or

- (b) What are the various sampling methods employed in ecological methods?



15. (a) Give a short note on fragmentation of biodiversity.

Or

- (b) Write a brief account on zoogeographical realms.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain the methods employed in the measurement of primary productivity.

Or

- (b) Describe the various components of a pond ecosystem.

17. (a) Write an essay on population explosion and its consequences.

Or

- (b) Give an elaborate account on sources and impacts of radioactive pollution in the environment.

18. (a) Write a detailed account of mineral resources, its uses and exploration.

Or

- (b) Narrate the types and management of forest resources in India.

Page 5

Code No. : 7187

19. (a) Discuss the values and uses of biodiversity for human welfare.

Or

- (b) Comment on the principles of biodiversity. Add note on diversity indices.

20. (a) What are the methods employed in conservation of wildlife.

Or

- (b) Write an elaborate account on the sanctuaries, national parks and biosphere reserves of India.

Page 6

Code No. : 7187

