

DECEMBER 2014

P/ID 40324/PZLG

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

Each answer should not exceed 50 words.

Define / Explain the following.

1. Primary Productivity.
2. Niche.
3. Carrying capacity.
4. Non renewable energy resource with example.
5. Biodiversity.
6. Radiometry.
7. Darwinism.
8. Isolating mechanism.
9. Quantum evolution.
10. Altruism.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

Each answer should not exceed 250 words.

11. (a) Illustrate food web with examples.

Or

- (b) Explain the types of ecological succession.

12. (a) Write short notes on Population pyramids.

Or

- (b) Bring out the physico - chemical characteristics of coastal environment.

13. (a) Write short notes on conventional energy sources with examples.

Or

- (b) Describe the biological effects of water pollution.

14. (a) Explain the types of fossils.

Or

- (b) Explain the principles of Lamarckism.

15. (a) Briefly describe Mayer Founder Principle.

Or

(b) What are the causes for extinction?

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

Each answer should not exceed 500 words.

16. (a) Describe the structural component of an ecosystem with examples.

Or

(b) Define population growth. What are the factors affecting population growth?

17. (a) Explain the process of Carbon cycle.

Or

(b) Define biome and classify the major biomes.

18. (a) Describe the prospects of non conventional energy sources.

Or

(b) Write an account on Wild life conservation.

19. (a) Discuss the comparative anatomical evidences of evolution.

Or

- (b) What is mimicry? Explain Batesian and Mullerian mimicry and their role in evolution.

20. (a) Explain the types of isolating mechanisms.

Or

- (b) Trace out the evidences for the origin of higher taxa from fossil record.
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