

OCTOBER 2012

P/ID 40324/PZLG

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Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 50 words.

Define /Explain the following.

1. Ecological Pyramid.
2. Ecological succession.
3. Estuary.
4. Values of biodiversity.
5. Global warming.
6. Recapitulation Theory.
7. Evolutionary Taxonomy.
8. Barriers.
9. Limulus.
10. Sympatric species.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) What is a food chain? Explain their types with examples.

Or

- (b) Explain the types of competition exists between individuals.

12. (a) Explain the types of population growth curves.

Or

(b) Define and explain the types of biomes.

13. (a) Explain the methods of rainwater harvesting.

Or

(b) Describe the role of soil fauna in soil fertility.

14. (a) What are the postulations of Lamarck?

Or

(b) Explain the process of fossilization.

15. (a) Discuss the characteristics of Batesian and mullerian mimicry.

Or

(b) Explain the role of polyploidy in evolution.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Explain the components of ecosystem with an example.

Or

(b) Describe the salient features of a population.

17. (a) Explain the process of biological nitrogen fixation.

Or

(b) Describe the physico-chemical features of coastal environment.

18. (a) Write an essay on the importance of non-conventional energy sources.

Or

(b) Write an account of wild-life conservation measures.

19. (a) Explain the physiological evidences of evolution.

Or

(b) Discuss the facts of Darwin's Theory of Natural Selection.

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

Or

(b) Trace the origin of higher taxa from the fossil evidences.

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