

MAY 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.

1. Define food chain.
2. Write notes on predation.
3. Write an account on Natality.
4. Write notes on Cryopreservation.
5. Define Homologous organs.
6. What are Fossils?
7. Write down the Use and disuse theory.
8. Define Genetic drift.
9. Write notes on Allopatric speciation.
10. Define kin selection.

PART B — (5 × 6 = 30 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 250 words.

11. (a) Write an account on the energy flow in an ecosystem.

Or

- (b) Discuss the influence of competition on community structure.

12. (a) Write an account on the human Population control.

Or

- (b) Write an account on Phosphorous cycle.

13. (a) Write an account on the adaptation of intertidal animals.

Or

- (b) Write an account on soil health and soil fauna.

14. (a) Discuss the significance of visual pigments on evolution.

Or

- (b) Write an account on the Views of De Vries on Mutation.

15. (a) Write an account on role of mutation in evolution.

Or

- (b) Write an account on rates of evolution.

PART C — (5 × 10 = 50 marks)

Answer ALL questions.

All questions carry equal marks.

Each answer should not exceed 500 words.

16. (a) Write an account on the different types of ecological pyramids.

Or

- (b) Describe the factors affecting population growth.

17. (a) Write an account on renewable and non renewable energy resources.

Or

- (b) Discuss the problems of urbanization.

18. (a) Discuss the evidences of evolution from genetics.

Or

- (b) Discuss the modern understanding of selection.

19. (a) Describe the different types of isolating mechanisms.

Or

(b) Write an account on ecological opportunities for speciation.

20. (a) Write an account on the structure of a species.

Or

(b) Write an account on the role of adaptation in evolution.

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