

E 2294

(Pages : 2)

Reg. No.....

Name.....

**B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2018**

**Second Semester**

Core Course VI—EVOLUTIONARY BIOLOGY AND ENVIRONMENTAL SCIENCE

(2013—2016 Admissions)

Time : Three Hours

Maximum Marks : 80

**Part A (Short Answer Questions)**

*Answer all questions.*

*1 mark each.*

1. What is detritus food chain?
2. Define 'enthalpy'.
3. Write about trophic levels.
4. What is carrying capacity ?
5. Explain 'symbiosis'.
6. What is mutualism ?
7. Write about causes of acid rain.
8. Explain Law of minimum.
9. What is smog ?
10. Define 'mutation'.

(10 × 1 = 10)

**Part B (Brief Answer Questions)**

*Answer any eight questions.*

*2 marks each.*

11. Explain speciation.
12. Write a note on natural selection.
13. Write an account on solid waste management.
14. Explain ecological pyramid of biomass.
15. Write an account on Green house effect.
16. What is adaptive radiation ?

Turn over

17. What is microevolution ?
18. Explain food chain with an example.
19. Differentiate decomposers and scavengers.
20. Write a note on causes and impact of global warming.
21. Write about Miller Urey experiment.
22. Explain health hazards of air pollution.

(8 × 2 = 16)

### Part C (Short Essay Type Questions)

*Answer any six questions.*

*4 marks each.*

23. Explain Darwinian theory of evolution.
24. Write about impact of environmental pollution.
25. Explain food web and its significance.
26. Illustrate carbon cycle and mention the significance.
27. Explain causes and effect of soil pollution.
28. Write an account on human evolution.
29. Write about energy flow in ecosystem.
30. Give an account on prebiotic environment.
31. Mention hazards of nuclear fallout.

(6 × 4 = 24)

### Part D (Long Essays)

*Answer any two questions.*

*15 marks each.*

32. Describe components of ecosystem.
33. Explain causes, impact and remedial measures of water pollution.
34. Explain biogeochemical cycle with nitrogen cycle.
35. Explain modern theories of evolution.

(2 × 15 = 30)