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# B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2016

### Sixth Semester

Core Course 21-ENVIRONMENTAL BIOTECHNOLOGY

(For B.Sc. Biotechnology)

[2013 Admissions]

Time: Three Hours

Maximum Marks: 80

## Part A (Objective Type Questions)

Answer all questions.
Each question carries 1 mark.

- 1. What is biological Oxygen demand?
- 2. What is algal bloom?
- 3. What is COD?
- 4. What is garbage segregation?
- 5. Define the term pollution.
- 6. Give the sources of radioactive pollution.
- 7. What is bioremediation?
- 8. Name two greenhouse gases.
- 9. Name the main source of air pollution in urban areas.
- 10. What are landfills?

 $(10\times1=10)$ 

#### Part B (Short Answer Type Questions)

Answer any eight of the following. Each question carries 2 marks.

- 11. What are the major enzymes used in biodegrading of organic compounds?
- 12. What is trickling filter process?
- 13. What is bio-magnification?
- 14. What is anaerobic pond?
- 15. What is meant by green chemistry?
- 16. How are heavy metals injurious to human health?
- 17. What causes air quality to deteriorate?

Turn over

- 18. What is the importance of coagulation?
- 19. What is the use of chlorination?
- 20. What is incineration?
- 21. What are catabolic plasmids?
- 22. What is bio-filtration technology?

 $(8 \times 2 = 16)$ 

#### Part C

Answer any six of the following. Each question carries 4 marks.

- 23. What are the criteria for testing water purity?
- 24. Explain the major causes of ozone layer depletion.
- 25. What are the different methods of waste water treatment?
- 26. What are the harmful effects of pesticides?
- 27. What is the principle of bacterial degradation?
- 28. Why is consumer education important?
- 29. What do you mean by sludge treatment?
- 30. What are aerosols? Give examples.
- 31. List sources of soil and water pollution.

 $(6 \times 4 = 24)$ 

#### Part D (Essay Questions)

Answer any **two** of the following. Each question carries 15 marks.

- 32. What are the different classes of pollutants? Explain with examples.
- 33. Give an account of the greenhouse effect and its role in global warming.
- 34. What are the methods adopted in biodegradation of lignin and cellulose? Explain.
- 35. Explain the method of anaerobic treatment of solid waste management.

 $(2 \times 15 = 30)$