

E 5936

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Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2017

Sixth Semester

Core Course 21—ENVIRONMENTAL BIOTECHNOLOGY

(For B.Sc. Biotechnology)

[2013 Admission onwards].

Time : Three Hours

Maximum Marks : 80

Part A

Answer all questions.

1 mark each.

1. What is anaerobic pond ?
2. Give the sources of radioactive pollution.
3. Name the major greenhouse gases.
4. Name the major noxious gases that pollute the atmosphere.
5. What is biological Oxygen demand ?
6. What is algal bloom ?
7. What is COD ?
8. What are aerosols ?
9. What is garbage segregation ?
10. What is bioremediation ?

(10 × 1 = 10)

Part B

Answer any eight of the following.

2 marks each.

11. How are lead and cadmium injurious to human health ?
12. What causes air quality to deteriorate ?
13. What is the importance of coagulation ?
14. What is the use of chlorination ?
15. What is incineration ?
16. What are the major enzymes used in biodegradation ?

Turn over

17. What is trickling filter process ?
18. What is meant by green chemistry ?
19. What is bio-filtration technology ?
20. What are catabolic plasmids ?
21. What is bio-magnification ?
22. What do you mean by sludge treatment ?

(8 × 2 = 16)

Part C

*Answer any six of the following.
4 marks each.*

23. What are the criteria for testing water purity ?
24. What is the principle of bacterial degradation ?
25. Discuss about landfills.
26. Explain the major causes of ozone layer depletion.
27. What are the different renewable sources of energy ?
28. What are the characteristics of aerobic micro-organisms capable of degrading organic pollutants ?
29. List sources of soil and water pollution.
30. What are the harmful effects of pesticides ?
31. Why is consumer education important ?

(6 × 4 = 24)

Part D

*Answer any two of the following.
15 marks each.*

32. Discuss the causes of greenhouse effect and its consequences on the environment.
33. What are the methods adopted in biodegradation of hydrocarbons ? Explain.
34. Explain the classification of pollutants with examples.
35. Explain various methods of waste water treatment.

(2 × 15 = 30)