



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

SIXTH SEMESTER – APRIL 2017

PB 6610- ENVIRONMENTAL BIOTECHNOLOGY

Date: 21-04-2017
01:00-04:00

Dept. No.

Max. : 100 Marks

PART-A

(10 x 2 = 20 Marks)

Answer the following, each within 50 words.

1. What is water pollution?
2. Define silaging.
3. What is meant by pollution abatement?
4. Define biomagnification.
5. Define bioaugmentation.
6. Comment on activated sludge process.
7. Write a note on bioremediation.
8. Define ecosystem.
9. What is biomineralization?
10. Define radiation pollution.

PART- B

(5 x 7 = 35 Marks)

Answer the following, each within 500 words. Draw diagrams and flow charts whenever necessary.

- 11(a) Write a short note on recycling of Sewage water.
(OR)
(b) Give a brief account on composting.
- 12(a) Explain R B C and point out its working methodology.
(OR)
(b) Explain the trickling filters and state how does trickling filter works?
- 13 (b) Write a short account of soil pollution.
(OR)
(b) Why are xenobiotics so difficult to degrade biologically?
- 14(a) Explain the types of bioremediation.
(OR)
(b) Give an account on reactors used in bioremediation.
- 15(a) Explain any two methods of bioremediation of heavy metals.
(OR)
(b) Write a brief note on bioleaching.

PART-C

(3 x 15 = 45 Marks)

Answer any three of the following, each within 1200 words, Draw Diagrams and flow charts whenever necessary.

16. Discuss in brief about the different sources of nonconventional energy
17. Explain oil spill and its bioremediation
18. Describe the methods of degradation of xenobiotics with suitable examples
19. Describe ex situ and in situ bioremediation
20. Explain : i) Development of biofilm; ii) Radionuclide pollution.
