



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SIXTH SEMESTER – APRIL 2017

PB 6614- ECOLOGY & ENVIRONMENTAL BIOTECHNOLOGY

Date: 24-04-2017
09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A

Answer the following, each within 50 words.

(10 x 2 = 20 Marks)

1. What is energy flow?
2. What is aecad?
3. What are heavy metals?
4. What is the composition of biogas?
5. What is mycoremediation? Give example.
6. What is phytoremediation?
7. Comment on activated sludge.
8. What is oxidation pond?
9. What note on radionuclides?
10. What are xenobiotics?

PART – B

Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary.

(5 x 7 = 35 marks)

- 11.a. Describe the various types of ecological pyramids.
[OR]
- b. Write briefly about the components of an ecosystem.
- 12a. Write an account on air pollution and its impact on living organisms.
[OR]
- b. What is a non-conventional energy resource? Write about their significance.
- 13a. Write an account on the importance of microbes in pollution control.
[OR]
- b. Describe the factors influencing bioremediation.
- 14a. Write an account on tertiary treatment of waste water.
[OR]
- b. Describe the method of removal of oil spill by microbes.
- 15a. Describe the degradation pathways of phenol.
[OR]
- b. Describe the various methods of purification of polluted air using filters.

PART – C

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

(3 x 15=45 marks)

16. Describe the conservation methods of biodiversity.
17. Write an essay on water pollution and the methods of controlling them.
18. Describe the types of bioreactors used in bioremediation.
19. Describe the secondary treatment of waste water.
20. Describe the methods adopted to treat soil polluted with pentachlorophenol and polychlorinated biphenyls.
