LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

Sc. DEGREE EXAMINATION -PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

SIXTH SEMESTER - APRIL 2018

PB 6614- ECOLOGY & ENVIRONMENTAL BIOTECHNOLOGY

Date: 21-04-2018	Dept. No.	Max.: 100 Marks
Time: 09:00-12:00		

PART - A

Answer the following, each within 50 words:

 $(10 \times 2 = 20 \text{marks})$

- 1. Define food web.
- 2. What is ecotype?
- 3. What is composting?
- 4. Define biogas.
- 5. Define phytoremediation.
- 6. What are the advantages of bioremediation?
- 7. Define biofilm.
- 8. What are sludge?
- 9. Define Xenobiotics.
- 10. What is biodegradation?

PART - B

Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary: (5 X 7 = 35marks)

11.a. Write short notes on abiotic factors of the ecosystem

(OR)

- b. Write notes on flow of energy in an ecosystem.
- 12.a. Explain the biological methods for the production of hydrogen.

(OR)

- b. Write the control measures of noise pollution.
- 13.a. Write the mechanisms involved in bioremediation

(OR)

- b. What are the factors that influences bioremediation.
- 14.a Write short notes on biosorption

(OR)

b. Write notes on Trickling filters

15.a Give an account of bioremediation on radionuclides. (OR) b. b. Write the importance of biofilters. PART - C Answer the following, each within 500 words. Draw diagrams and flowcharts (3 X 15 = 45 marks)wherever necessary: 16. Write an essay on the methods used for conservation of biodiversity. 17. Give an account on water pollution and its causes. 18. Explain the various phytoremediation techniques. 19. Explain the secondary treatment of wastewater. 20. Describe biodegradation of phenol and polychlorinated biphenyls.