LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY SIXTH SEMESTER – NOVEMBER 2015

PB 6610/PB 6605 - ENVIRONMENTAL BIOTECHNOLOGY

Date: 25/09/2015 Time: 09:00-12:00	Dept. No.	Max. : 100 Marks	

PART-A

Answer the following, each within 50 words only:

(10X2=20 marks)

- 1. What are pollutants?
- 2. What is a bioreactor?
- 3. Define biosorption.
- 4. What are effluents?
- 5. What are Xenobiotics?
- 6. Define Global warming.
- 7. What is meant by phytoremediation?
- 8. Define composting.
- 9. Define land fills.
- 10. What is Biocorrosion?

PART-B

Answer the following, each within 500 words only: Draw diagrams wherever necessary:

(5X7=35marks)

- 11. a. Write short notes on recycling of waste products.
 - Or
 - b. Give a brief account on water pollution.
- 12. a. Describe the various methods involved in oil spill bioremediation.

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- b. Comment on the bioremediation of heavy metals.
- 13. a. Give an account on the degradation of phenol.

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- b. Write short notes on purification of polluted air.
- 14. a. Describe the structure of any one of the bioreactor used in bioremediation.

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- b. Explain *insitu* bioremediation.
- 15. a. Describe methods used for the bioremediation of radio nuclides.

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b. Explain the role of biofilm in bioremediation.

PART-C

Answer any THREE of the following, each within 1200 words only: (3X15=45marks) Draw diagrams wherever necessary:

- 16. Give an account on biogas production.
- 17. What are the secondary or biological treatment methods of waste water?
- 18. Give an account on biodegradation of pentachlorophenol and Polychlorinated biphenyls (PcBs).
- 19. Describe the various types and mechanisms involved in bioremediation.
- 20. Write an essay on bioleaching.

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