Name									
Reg. No			 						

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2016

(CUCSS-PG)

(Environmental Science)

CC15PES3 C14 - Waste and Waste Management

(2015 Admission)

Time : Three Hours Maximum : 36 Weightage

- I. Answer all questions. Each question carries 1 weightage:
- 1. What is hazardous waste?
- 2. What is Pyrolysis?
- 3. Solid waste generation rate in Kerala
- 4. Define garbage
- 5. What is proximate analysis in municipal solid waste
- 6. What you mean by energy content of municipal solid waste
- 7. What is a secure landfill?
- 8. Identify the 3Rs used in waste management
- 9. What is biomedical waste?
- 10. What is mean by volume reduction in solid waste?
- 11. Define Methanogenesis
- 12. What is a Bioreactor?
- 13. Explain Vermiwash
- 14. Comment on Windrow composting

 $(14 \times 1 = 14 \text{ weightage})$

- II. Answer any seven questions. Each question carries 2 weightage:
- 15. Identify the types and sources of solid waste
- 16. Recycling and reuse of solid waste
- 17. Write note on different types of sanitary landfills
- 18. Discuss the leachate problem in landfill sites and how it is managed.
- 19. Give an account of composting
- 20. Discuss the management of Biomedical waste
- 21. Comment on the various legislation on management of municipal solid waste
- 22. Briefly explain cell and protein immobilisation techniques
- 23. Enumerate the primary treatment techniques of waste water
- 24. Narrate one success story of waste management in India

 $(7 \times 2 = 14 \text{ weightage})$

- III. Write an essay on any two of the following. Each question carries 4 weightage:
- 25. Write an essay on various waste management approaches and handling of domestic wastes
- 26. Give an account of the generation, treatment and management of nuclear waste.
- 27. Briefly describe the treatment schemes for tannery and sugar industry waste water
- 28. Write an essay on various aspects of vermicomposting. List out its advantages.

 $(2 \times 4 = 8 \text{ weightage})$
