Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 41155

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2014.

Eighth Semester

Civil Engineeering

10111 CEE 36 — MUNICIPAL SOLID WASTE AND MANAGEMENT

(Regulation 2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Name the sources of solid waste generation.

2. What are the legislative measures adopted in India with respect to solid waste disposal?

3. What are the factors to be considered in the onsite storage of solid wastes?

4. What are the types of containers used for onsite storage of solid wastes?

5. What are the types of solid waste collection systems?

6. Name the activities involved in the collection of solid wastes.

7. What are the objectives of solid waste processing systems?

8. What is meant by pyrolysis?

9. List out the factors to be considered before selecting a site for landfill.

10. What is a leachate?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the types of solid wastes. Also write a note on the factors governing the generation of solid wastes.

Or

(b) What is meant by characterization of solid waste? Discuss the important characteristics of solid wastes.

12. (a) Discuss the various methods of onsite processing of solid wastes.

Or

(b) Explain the health and economic aspects of storage of solid wastes relating to Indian conditions.

13. (a) Describe the operational sequence involved in stationary and hauled container systems.

Or

(b) Explain the steps involved in laying out routes for solid waste collection systems.

14. (a) Describe in detail, the mechanical methods of volume reduction of solid wastes.

Or

(b) Explain the working of a continuous feed mass fired municipal incinerator with a neat sketch. Also discuss about the facilities needed for air pollution control due to incinerators.

15. (a) What are the principal methods used for land filling dry areas. Explain any one of them with a neat sketch.

Or

(b) Explain the methods adopted for the control of leachate movement.