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

Question Paper Code : 31036

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Eighth Semester

Civil Engineering

080100078 — MUNICIPAL SOLID WASTE MANAGEMENT

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List out the typical composition of MSW.
2. Define: Industrial solid waste
3. What is segregation of solid wastes?
4. List out the different types of incinerators.
5. What is secure land-fill
6. Define: Le-chate?
7. Define: Pyrolysis.
8. Explain: Vermi - composting.
9. Define Refuse Derived Fuels (RDF).
10. What is meant by 3R principle?

PART B — (5 × 16 = 80 marks)

11. (a) (i) What are the objectives of a good solid waste management system?

(ii) What are the factors affecting the generation of solid wastes? (8)

Or

(b) (i) Discuss the physical and chemical composition of solid wastes. (8)

(ii) Write short note on :

(1) Effect of improper disposal of solid wastes (4)

(2) Public awareness in MSW Management. (4)

12. (a) (i) Discuss in detail on- site storage methods of solid wastes. (8)

(ii) Write short notes on: source reduction of solidwaste recovery of materials from solidwaste. (8)

Or

(b) (i) Discuss in detail the importance of on-site segregation of solid wastes. (8)

(ii) Write short notes on: Materials used for containers. (8)

13. (a) (i) Explain briefly the problems associated with collection of solid wastes as per Indian situations. (8)

(ii) Write short notes on: Transfer stations. (8)

Or

(b) (i) How will you find the location of transfer stations? (8)

(ii) Write short notes on :

1. Man power requirement in MSW Management. (4)

2. Types of vehicles used in MSW Handling. (4)

14. (a) Explain the various methods of composting techniques with neat sketches. (16)

Or

(b) Write short notes on :

(i) Resource recovery from solid wastes. (8)

(ii) Multiple chamber incinerator. (8)

15. (a) Discuss the selection procedure for sanitary land fill projects. (16)

Or

(b) Write short notes on :

(i) Leachate Management (8)

(ii) Gases in Landfill. (8)
