

Reg. No.:						•

Question Paper Code: 31189

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Seventh Semester

Civil Engineering

CE 2039/CE 714 – MUNICIPAL SOLID WASTE AND MANAGEMENT

(Regulation 2008)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. What is garbage and trash?
- 2. List the factors affecting the generation rate of solid waste.
- 3. Write a note on segregation of solid waste.
- 4. List the different materials used for storage containers.
- 5. What are collection routes?
- 6. What is transfer station?
- 7. List the objectives of waste processing.
- 8. Define pyrolysis.
- 9. What is landfarming?
- 10. Define leachate.

PART B —
$$(5 \times 16 = 80 \text{ marks})$$

11. (a) Enumerate in detail about the sampling techniques for characterization of solid waste.

Or

(b) Explain the environmental legislation acts on management and handling of solid waste in detail.

12. (a) Write a detailed note on onsite storage methods for solid waste.

Or

- (b) Give the various impacts on public health and economic aspects of solid waste storage.
- 13. (a) Enumerate the methods of solid waste collection and transportation.

Or

- (b) List the factors involved in the selection of location, operation and maintenance of solid waste under Indian conditions.
- 14. (a) Enumerate the methods of composting in solid waste management.

Or

- (b) Explain in detail about the processing techniques and equipments used for resource recovery from solid wastes.
- 15. (a) List and explain the important factor that must be considered in the site selection, design and operation of sanitary landfill.

Or

(b) Explain in detail the collection and treatment of leachate in the landfill.