

A 1095

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2007.

Eighth Semester

Civil Engineering

CE 057 — MUNICIPAL SOLID WASTE AND MANAGEMENT

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Name any four recyclable type solid wastes.
2. Give the percapita solid waste generation rate for our country and for a urban centre.
3. What do you mean by on site handling of solid waste?
4. List the parameters influencing the capacity of containers.
5. Define the term haul with respect to hauled container system.
6. Give the collection frequency and container capacity in slums/old urban areas.
7. Name any four equipments employed in off-site processing of solid waste.
8. What do you mean by resource recovery from solid waste?
9. List the draw backs associated with the open land dumping of solid waste.
10. Name the ground water pollution control accessories/measures to be installed in a sanitary land fill.

PART B — (5 × 16 = 80 marks)

11. (a) Write short notes on the following :
 - (i) Decreasing solid waste generation through "reduction". (6)
 - (ii) Functional elements of solid waste management system. (10)

Or

- (b) Explain the factors influencing the solid waste generation rates.

12. (a) Explain the factors to be considered in evaluating on-site processing. (16)

Or

(b) Write short notes on :

(i) Economic aspects of storage. (8)

(ii) On-site processing in low-rise dwellings area. (8)

13. (a) Explain the different types of collection systems.

Or

(b) Describe the general methodology adopted in fixing solid waste collection routes.

14. (a) What do you mean by composting? Explain the Windrow composting process and list influencing factors also.

Or

(b) (i) List the purposes of adopting solid waste processing techniques. (4)

(ii) Discuss the mechanical methods of components separation. (12)

15. (a) (i) List the factors influencing the site selection for solid waste disposal. (8)

(ii) Explain the trench method of sanitary land filling. (8)

Or

(b) (i) Explain the operations involved in closure of land fills. (8)

(ii) Write the advantages and disadvantages of sanitary land fills. (8)