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Question Paper Code: 31184

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Elective

Civil Engineering

01UCE917 – MUNICIPAL SOLID WASTE MANAGEMENT

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What are the sources of Solid wastes?
2. What are the impacts of solid waste on health?
3. Classify the collection systems for solid wastes?
4. What are the types of equipments used for the onsite handling of solid wastes?
5. How to select transfer station locations?
6. What are the steps involved in collection of solid wastes?
7. Give the processing techniques of Municipal Solid wastes.
8. Define source reduction.
9. Mention the types of land filling methods.
10. What are the equipments used for Sanitary landfills?

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss the various sources of solid waste generation and the compositions of solid waste from each source. (16)

Or

- (b) (i) Explain the properties of MSW. (8)
- (ii) Write a note on NGO's contribution in solid waste management. (8)
12. (a) List out the factors to be considered in selection of equivalent for on-site processing of solid wastes. Explain them. (16)

Or

- (b) How would you segregate the solid waste and write down the requirement and methods of separation of solid waste? (16)
13. (a) Describe in detail the methods of collection system and the type of vehicle used for collection system. (16)

Or

- (b) Discuss the various types and requirements of a transfer station. (16)
14. (a) (i) Explain the physical processing of municipal solid waste management. (8)
- (ii) Discuss the control performance parameters of composting method. (8)

Or

- (b) Define composting. Explain the different types of composting technologies used. (16)
15. (a) Explain in detail about the sanitary landfill design steps as represented by logical sequence. (16)

Or

- (b) Categorize the predominant terms used in MSW land fill design process. (16)
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