

B.Tech. IN CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00385

December, 2014

**BICEE-001 : SOLID AND HAZARDOUS WASTE
MANAGEMENT**

Time : 3 hours

Maximum Marks : 70

Note : Answer any **seven** questions. All questions carry equal marks.

1. Explain the sources of solid wastes. Discuss the types of non-hazardous solid waste. 10
2. (a) Illustrate the factors affecting the generation rates of solid waste. 5
(b) Describe the ordinary physical composition of municipal solid waste (percent by weight). 5
3. Discuss the on-site handling methods of solid waste in detail. 10
4. What are the modes of operation in solid waste collection ? Explain. Describe the different unit operations in solid waste collection. 10

5. Identify the obstacles to resource recovery. What are the techniques involved in resource recovery ? Explain in detail. 10
6. Discuss the solid waste disposal methods in brief with relative advantages and disadvantages. 10
7. Discuss the four important characteristics of hazardous waste in detail. 10
8. (a) List the treatment methods of hazardous waste. 5
(b) Identify the sources of hazardous waste. 5
9. Discuss the areas of application of any four important industrial wastes in detail. 10
10. Write short notes on the following : 2×5=10
(a) Leachate collection and treatment
(b) Closure of landfills
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