

B.Tech. CIVIL ENGINEERING (BTCLEVI)**Term-End Examination****December, 2015****BICEE-001 : SOLID AND HAZARDOUS WASTE
MANAGEMENT***Time : 3 hours**Maximum Marks : 70*

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

1. (a) Define Municipal Solid Wastes (MSW).
What is the composition of typical MSW in a metropolitan city? 6
- (b) Write a detailed note on infectious wastes in Municipal Solid Wastes (MSW). 8
2. (a) Write a detailed note on generation, collection, segregation and disposal of MSW. 7
- (b) Explain in detail about the various biological methods for the treatment of solid wastes. 7
3. (a) What is Recycling ? Explain its significance on management. 7
- (b) Describe the various thermal conversion methods for MSW. 7

4. (a) What is an engineered landfill ? With the aid of a neat sketch, explain the working of different components of an engineered landfill. 7
- (b) Explain the various sources of hazardous wastes in domestic and industrial wastes. 7
5. (a) Explain the various treatment techniques and disposal methods of industrial solid wastes. 7
- (b) Discuss the factors to be considered for composting of solid wastes. 7
6. (a) What is Hazardous waste ? How is it classified based on its quality ? 7
- (b) Explain the various land disposal techniques of Hazardous wastes. 7
7. (a) What are the various legal aspects of Municipal solid waste collection ? 7
- (b) Compare between disposal of solid wastes on land and in water bodies. 7
8. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Site remediation
- (b) Leachate collection
- (c) Closure of landfill sites
- (d) Factors affecting the generation rate of solid wastes