

B.Tech. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

00513

June, 2018

**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) What are the sources of hazardous waste generated in houses and industries ? 7
- (b) Elaborate the incineration procedures for disposal of solid waste. 7
2. (a) Explain the types of solid waste collection routes and their layouts. 7
- (b) Describe the landfilling process for solid waste management. 7
3. (a) Describe the various methods of storage of solid waste. 7
- (b) Explain the environmental issues related to the disposal of industrial solid waste in water bodies. 7

4. (a) Explain how groundwater monitoring during operations and after closure of a landfill site is conducted. 7
- (b) How is the treatment of hazardous waste carried out? 7
5. (a) Explain air and steam stripping processes for hazardous waste management. 7
- (b) Explain the procedure of biological conversion of solid waste. 7
6. (a) Describe the recycling methodology of municipal solid waste. 7
- (b) Explain the procedure to control landfill leachates. 7
7. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Composition of municipal solid waste
- (b) Toxic solid waste
- (c) Windrow composting
- (d) Chemical conversion of solid waste
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