

**B.Tech. Civil (Construction Management)**

**Term-End Examination**

**June, 2013**

**ET-581(C) : BUILDING SERVICES**

*Time : 3 Hours*

*Maximum Marks : 70*

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*Note : Attempt any five questions. All questions carry equal marks. The answers shall be in your own language.*

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1. Discuss the methods used for treatment of sewage. 14  
How the treated effluents are disposed of ?  
Describe the effects of the effluent in river water.
  
2. Explain in detail *any two* of the following : 2x7=14
  - (a) Fire escape routes in tall buildings.
  - (b) Hydrant system for extinguishing fire.
  - (c) Sprinkler system for extinguishing fires.
  
3. Discuss various methods of plumbing used in 14  
buildings.
  
4. Discuss in detail *any two* of the following : 2x7=14
  - (a) Water supply systems in tall buildings.
  - (b) Cooling towers.
  - (c) Mechanical ventilation.

5. Discuss various types of materials available for water proofing and their suitability for various applications. 14
  6. Enumerate the major components of an electrically operated elevator and explain its operation. 14
  7. What are the different methods of earthing ? 14  
Draw the neat diagram of plate earthing system.
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