

B.Tech. Civil (Construction Management)**Term-End Examination****December, 2015****ET-581(C) : BUILDING SERVICES***Time : 3 hours**Maximum Marks : 70*

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

1. Explain the operations involved in the treatment of water with the help of a neat diagram. 14
2. (a) What do you understand by UPS ? Discuss its need. 7
 - (b) Describe the various types of UPS Systems. 7
3. (a) What are the reasons of leakages in new and old buildings ? 7
 - (b) Discuss the various types of waterproofing treatments available in the country. Discuss their suitability for various applications. 7
4. (a) What do you understand by the term air-conditioning ? Why is it necessary ? How does it differ from ventilation ? 7
 - (b) What are the main components of a simple vapour compression refrigeration system ? Describe their functions. 7

5. What is composting ? Discuss the various methods of composting. Differentiate between anaerobic decomposition, aerobic decomposition and vermi-composting. 14
6. (a) Discuss the effects of fire on construction materials like brick, concrete and steel. 7
- (b) Explain the various types of fire detectors used for detection of fire. 7
7. Write short notes on the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Removal of Fluorides
- (b) Rigid and Flexible Sealants
- (c) Algae Control
- (d) Alarm and Extinguishing Systems
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