

B.Tech. Civil (Construction Management)**Term-End Examination****June, 2008****ET-581(C) : BUILDING SERVICES**

Time : 3 hours

Maximum Marks : 70

Attempt any five questions. All questions carry equal marks. Give neat sketches in support of your answers.

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1. (a) Discuss various factors that affect the rate of demand for domestic water supply. 7
 - (b) A sedimentation tank is designed for an overflow rate of 4000 litres per m^2 per hour. What percentage of particles of diameter 0.02 mm will be removed in this tank at $10^\circ C$? 7
 - (a) What do you mean by hydraulic testing of pipe sewers? 7
 - (b) What are the various methods of disposal of refuse? Describe any two in detail. 7

3. (a) Discuss typical electrical distribution system for a commercial complex. 7
- (b) Discuss the various methods for the estimation of illuminance. 7
4. (a) Plan a dog-legged stair for a building in which the vertical distance between the floors is 3.6 m. The stair hall measures 2.5 m x 5.5 m. 7
- (b) How is the size of lift decided on the basis of quality and quantity of services? 7
5. (a) What is fire load? How do you grade buildings according to fire resistance? 7
- (b) Discuss the different types of water proofing treatment. 7
6. (a) How are the lighting protection systems designed? 7
- (b) How is the ventilation requirement estimated? 7
7. Write short notes on any *four* of the following : $4 \times 3\frac{1}{2} = 14$
- (a) Pressure filter
- (b) Standards for water quality
- (c) Fire effects and fire severity
- (d) Anti termite treatment
- (e) Various systems of electrical wiring
- (f) Operation and maintenance of lift