

**B. Tech. 8th Semester (Civil Engg.) Examination,
December-2013**

BUILDING SERVICES

Paper- CE- 404E

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt any five questions. All questions carry equal marks.

1. (a) What are the W. H. O. standards for quality of water to be supplied in residential buildings ? 10
- (b) Write a short note on water supply networks in a multistoried building. 10
2. (a) What are the basic principles of building drainage ? 10
- (b) What are various types of drainage pipes materials? Explain. 10
3. What are various methods of refuse collection and handling from a small and large buildings ? 20
4. (a) What do you understand by absorption of sound ? How does this take place ? Name various absorptive surfaces. 10
- (b) Explain in brief general common acoustic defects and suggest remedial measures. 10

5. (a) Explain in brief various systems of mechanical ventilation. 10
- (b) What do you mean by air conditioning? Explain its necessity. Also mention in brief various air conditioning units. 10
6. (a) What are different classifications and types of lifts? 10
- (b) What are the lift codes and rules? Write the main features of fireman's lift. 10
7. (a) Discuss different types of heating materials used for heating purpose in a building. 10
- (b) Write short note on solar water heaters. Explain the general principles of functioning of it. 10
8. Write short notes on any *four* : $4 \times 5 = 20$
- (a) Car speed
- (b) Fire safety of lifts
- (c) Hot water services
- (d) Arrangement of lifts
- (e) Valves and taps
- (f) Water supply requirements.