

**BACHELOR OF ARCHITECTURE (B.Arch.)**

**Term-End Examination**

**June, 2016**

00228

**BARE-072 : ADVANCED BUILDING SERVICES  
(ELECTIVE 1)**

*Time : 3 hours*

*Maximum Marks : 70*

***Note :** Attempt any **five** questions. All questions carry equal marks. Draw neat sketches wherever necessary.*

1. Write short notes on any **four** of the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) PBX
- (b) EPABX
- (c) Refuse Disposal
- (d) Fire Lifts
- (e) Staircase Pressurisation

2. Describe in brief, the safety rules and considerations for installations of escalators and passenger conveyors.

14

3. Discuss with neat sketches, the cabling system for telecommunication installations in a high rise building. 14
4. Explain waste disposal hierarchy — Reduce, Reuse and Recycle. Write about the types of waste disposal systems. 14
5. (a) Define water distribution system. Write about their components and arrangements. 6
- (b) Calculate the water demand for a 15-storied multi-family building, where each floor has 4 housing units and each unit has 2 bedrooms with attached toilets, 1 common toilet and a drawing room. There are 4 such multi-storied buildings on a circular plot. Discuss which kind of distribution layout system will be used. Explain it with sketches. 8
6. Discuss energy saving and regeneration techniques in building services, with appropriate examples. 14
7. Write about the fire fighting devices/equipments provision of fire safety as per National Building Code and its design implications. 14
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