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

### **Term-End Examination**

### DDD62 December, 2017

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

Time : 3 hours

Maximum Marks: 70

Note: Parts A and C are compulsory. Attempt any three questions from Part B.

#### PART A

1.	( <b>a</b> )	Write	$\mathbf{short}$	notes	on	any	four	of	the	
		followi	ng :							

- (i) Exit Requirements
- (ii) Occupant Load
- (iii) Staircase Pressurization
- (iv) Fire Lifts
- (v) Emergency and Escape Lighting
- (b) Describe in brief, water supply requirements for fire prevention. 10

4

#### PART B

- **2.** Discuss with neat sketches, the cabling system for telecommunication installations in a high rise building.
- **3.** Explain in detail, the sanitation and drainage design for a high-rise building. Use neat sketches to illustrate the pipes and components involved.
- 4. Write about the fire-fighting devices provision of fire safety as per the National Building Code and its design implications.
- 5. Discuss the energy saving and regeneration techniques in building services with appropriate examples.

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### PART C

- 6. (a) Write about the types of drainage systems disposing surface water.
  - (b) Differentiate between Inspection Chambers, Manholes and Soakpits.

#### OR

- 6. (a) Discuss the electrical distribution systems in a high rise building.
  - (b) Draw neat sketches to elaborate wiring systems and other components involved in supply and distribution.

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