

**B.ARCH. SEM – VI (CBCS – 2015 COURSE) : SUMMER - 2019**  
**SUBJECT : BUILDING SERVICES – IV**

Day : Saturday  
Date : 11/05/2019

S-2019-3717

Time : 10.00 AM TO 12.00 PM  
Max. Marks : 60

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**N. B. :**

- 1) Attempt **ANY THREE** questions from each section.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answers to both the sections should be written in **SEPARATE** answer books.
  - 4) Draw neat and labeled diagram **WHEREVER** necessary.
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**SECTION – I**

- Q. 1** Write short notes with appropriate diagrams. (10)
- a) Fire extinguishers
  - b) Constant pressure up-fed water distribution in high-rise buildings
- Q. 2** Explain with neat sketches the provision of sprinkler system in high rise buildings. (10)
- Q. 3** Write short notes with appropriate diagrams. (10)
- a) Types of service core
  - b) Hydraulic elevators
- Q. 4** Enumerate and discuss in brief all the different services that should be considered in the planning of service core of a high-rise building. (10)
- Q. 5** Writes short notes with appropriate diagrams: (10)
- a) Sovent type drainage system in high-rise buildings
  - b) Smoke detectors

**SECTION – II**

- Q. 6** Writes short notes with appropriate diagrams: (10)
- a) NBC code requirements for fire stairs in high-rise building
  - b) Role of sensors and controls in a BAS
- Q. 7** Explain with neat sketches the components of traction-type elevators. (10)
- Q. 8** Writes short notes with appropriate diagrams: (10)
- a) Mechanical floor in high-rise buildings
  - b) Two-pipe drainage system in high-rise buildings
- Q. 9** Explain how building automation can help with energy efficiency with examples of at least two services in high-rise building. (10)
- Q.10** Writes short notes with appropriate diagrams: (10)
- a) Double-deck elevators
  - b) Sensors and controls in BAS

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