

**BACHELOR OF ARCHITECTURE (CBCS - 2015 COURSE) B. Arch. Sem-  
VII : WINTER - 2021**

**SUBJECT: BUILDING CONSTRUCTION & MATERIALS – VII**

Day: Thursday  
Date: 23-12-2021

Time: 10:00 AM-01:00 PM  
Max Marks. 60

W-13567-2021

**N.B.**

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.**
- 2) Attempt any **TWO** questions from **Q. No. 2, 3, 4**
- 3) Attempt any **TWO** questions from **Q. No. 6, 7, 8**
- 4) Draw neat and labelled diagram **WHEREVER** necessary.

**SECTION - I**

- Q.1** Write short notes on any **TWO** of the following: **(10)**
- a) Space frames
  - b) Hollow core system of precast section
  - c) Acoustical defects
- Q.2** Explain the design parameters for Basement construction and explain in detail the importance of retaining wall. **(10)**
- Q.3** Design a roof for seating arena of size 15m × 55m in dimension using folded plate system. **(10)**
- Q.4** Design a seating arrangement for an Auditorium of capacity 300 seats. **(10)**

**SECTION - II**

- Q.5** Write short notes on any **TWO** of the following: **(10)**
- a) Domes
  - b) Acoustical absorptive materials
  - c) Single and double precast 'T' slab system
- Q.6** Explain the types of tension structures like membrane, cable net and air supported. **(10)**
- Q.7** Design a double basement of size 35m × 75m used for parking purpose showing details of ramp and ventilation. **(10)**
- Q.8** Design a roof a banquet hall of size 30m × 60m using any type of precast slab system with expansion joint detail. **(10)**