Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B. Architecture (Sem.–7/8)

HIGH RISE BUILDINGS – I

Subject Code : BACH-805

M.Code : 72749

Date of Examination : 07-07-22

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **Question no.1 is COMPULSORY. Each part carries TWO marks.**
2. **Attempt any FOUR questions from the rest. Each question carries TWELVE AND A HALF (12.5) Marks.**
3. **Attempt any ONE question from each SECTION.**
4. **FIVE questions are to be attempted in total.**
5. **Assume any missing data/dimensions. Draw neat sketches where necessary.**

SECTION-A

1. Explain briefly :

a. Tubular system

b. Material Stiffness in high rise buildings

c. Plate wall cladding

d. The bearing wall structure

e. Viscous damping in high rise buildings

SECTION-B

2. What are the advantages of construction technology in High Rise Building? How has technology changed the building industry? (6.5+6=12.5)

3. What are the issues to be considered for the high-rise building? What materials are used for the framework of a skyscraper? (7.5+5=12.5)

4. What are the design criteria for high rise buildings? What is the biggest challenge for designer of high rise building? (7+5.5=12.5)

5. Explain the different types of construction techniques in high rise buildings? (12.5)

SECTION-C

6. What are the recommendations of NBC 2005 for the foundation of the building? What is a high-rise building as per NBG? (8+4.5=12.5)

7. How was the construction process of *'The Burj Khalifa'* different from other projects? (12.5)

8. What are the different fire rating considerations for high rise buildings to ensure fire safety? Explain in detail. (12.5)

9. Explain in detail the different types of hollow tube and interior braced tube. (12.5)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.