

Roll No.....  
Total No. of Questions: [07]

Total No. of Printed Pages: [01]

**B. Architecture (Semester – 5<sup>th</sup>)**  
**TALL BUILDINGS**  
**Subject Code: BARC1-539**  
**Paper ID: [120131]**

**Time: 03 Hours**

**Maximum Marks: 60**

**Instruction for candidates:**

- Question one is compulsory
- Attempt four questions from Unit-I, II & III by attempting at least one from each unit.

Q1. Write short notes on the following: **(2 marks each)**

- a. What is a high-rise building?
- b. Different types of foundations for high rise buildings.
- c. Explain role of dampers in high rise buildings.
- a. Enlist various limitations of high-rise buildings.
- b. Briefly discuss origin of high-rise buildings.
- c. What is full form of CTBUH?

**UNIT-I (12 marks each)**

- Q2. Explain the significance of high-rise buildings in the urban context, including their definitions, need, and importance. Discuss the approaches, planning considerations, and design principles involved in the development of high-rise structures.
- Q3. Analyze the impact of siting high-rise buildings in the urban context, considering factors such as urban density, land use, transportation, and environmental considerations.

**UNIT-II (12 marks each)**

- Q4. Discuss the materials, construction techniques, and structural systems commonly used in the construction of high-rise buildings. Evaluate the importance of these factors in ensuring structural integrity, durability, and safety.
- Q5. Explore the design considerations for horizontal and vertical circulation in high-rise buildings. Discuss the challenges and strategies for efficient circulation within tall structures.

**UNIT-III (12 marks each)**

- Q6. Examine the norms & standards outlined in the National Buildings Code (NBC) & local Bye-laws concerning the construction of high-rise buildings. Discuss the regulatory requirements related to structural safety, fire protection, & environmental sustainability.
- Q7. Discuss any iconic high-rise building worldwide, focusing on their architectural significance, structural innovations, & urban impact & their contributions to the contemporary contribution practices.