Roll No……..….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [07]

B. Architecture (Semester – 5th)
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.