

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Arch - SEMESTER- VI EXAMINATION – SUMMER 2024

Subject Code: 2X65002

Date:20-05-2024

Subject Name: Building Construction - VI

Time:10:30 AM TO 01:30 PM

Total Marks:40

Instructions:

- 1. Attempt any four out of seven questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**
- 4. Simple and non-programmable scientific calculators are allowed.**

- Q.1** Explain in brief different types of wall cladding systems used in different types of high-rise structures with the help of neat sketches. **10**
- Q.2** Explain two different types of structural system for a 100m - high skyscraper situated at out-skirts of Ahmedabad with the help of neat sketches. **10**
- Q.3** What is a double-glazed unit (DGU)? State and explain any two types of DGU. Discuss the advantages and disadvantages. **10**
- Q.4** Choose proper HVAC system for commercial purpose in high rise building. How does it function in high rise building. Also discuss about vertical circulation in high rise building. **10**
- Q.5 (a)** Suggest the different latest construction technology used for constructing skyscraper in modern era of India. **05**
- (b)** What is PHE. Give importance of PHE in multi-storey building **05**
- Q.6 (a)** Mention the norms of fire services used in high rise building. **05**
- (b)** State types of high rise structures with proper sketch. Which are the special materials need to be explored for high rise structures. **05**
- Q.7** Mark different component of stair & ramp in sketches. Explain where and why stair & ramp are use in high rise building. **10**
