

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.ARCH - SEMESTER-VI EXAMINATION – SUMMER 2022

Subject Code:2X65002

Date:03-06-2022

Subject Name:Building Construction - VI

Time:10:30 AM TO 01:30 PM

Total Marks: 40

Instructions:

- 1. Attempt Any four 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** Which are different types of floor systems used in high rise structures. Explain them with neat sketches. **10**
- Q.2** Mention different forces acting on multi-storey building. Describe with its nature and its effect on high rise structure. **10**
- Q.3** A residential building is located near river. Building height is near about 100 meter. Propose suitable type of structural system for residential building with suggestion and sketch. **10**
- Q.4** Choose proper HVAC system for office purpose in high rise building. How does it function 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)** Mention the norms of fire services used in high rise building. **05**
- Q.6 (a)** What is PHE. Give importance of PHE in multi-storey building. **05**
- (b)** State types of high rise structures with proper sketch & give suitable examples located in India. **05**
- Q.7** Mark different component of stair & ramp in sketches. Explain where and why stair & ramp are use in high rise building. **10**
