

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.ARCH - SEMESTER– IV • EXAMINATION – SUMMER 2017**

**Subject Code: 1045002**

**Date: 03/05/2017**

**Subject Name: Building Construction - IV**

**Time: 10.30AM to 01.30PM**

**Total Marks: 40**

**Instructions:**

1. Attempt all questions.
2. Make suitable sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Draw sketches wherever required.

- Q.1** (a) What is 'Day Lightning'? What is meant 'Day lightning Factor'? **04**  
(b) Explain the following terms: (any four) **04**  
1. MCB                      4. Electric Substation  
2. LT Room                5. Transformation  
3. Shoring

- Q.2** (a) Draw & Explain Cavity walls in bricks and Hollow concrete blocks. **04**  
(b) What is False Ceiling? Enlist and Explain at least three materials used for False ceiling **04**

**OR**

- (b) What is Scaffolding? Explain the types of Scaffolding. **04**  
**Q.3** Explain the different stages of R.C.C. Constructions. Draw sketches were required. **08**

**OR**

- Q.3** (a) What are Air Coolers & Air Conditioners? Differentiate each of the following **04**  
(b) What is AC & DC- power supply? Which type of current is supplied at your home appliances – (LED TV, Microwave Oven, Refrigerator, etc)? **04**  
**Q.4** Design an Architect's office with a pantry of 4m by 6m on a 2<sup>nd</sup> floor of a commercial complex; assume the other information like Ventilation, Water supply & Electric connection etc; required for it. Draw furniture layout, section & details showing False Ceiling layout with Electric fitting in suitable scale. **08**

**OR**

- Q.4** Design a Kitchen with Store room of 4m by 5m for a ground floor row house; assume the other information like ventilation, water supply & drainage connections etc; required for it. Draw plan section & details showing fittings & services in suitable scale. **08**  
**Q.5** Explain 'Heating Ventilation & Air Conditioning' system. Do essential of sketches where required. **08**

**OR**

- Q.5** Write difference between each of them: (any two) **08**  
1. Shuttering & Formwork  
2. Partition & paneling  
3. Escalator & Elevator

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