

**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
  2. LT Room
  3. Shoring
  4. Electric Substation
  5. Transformation
- 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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