

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.ARCH. - SEMESTER-IV EXAMINATION – WINTER 2015**

**Subject Code: 1045002****Date: 12/12/2015****Subject Name: Building Construction-IV****Time: 02:30pm to 05:30pm****Total Marks: 40****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. All question carry equal marks. (08 marks)

- Q.1** (a) Enlist and explain types of wiring and describe in detail with sketches the electrification of a small scaled residential building. (04)
- (b) Write with examples the use of Elevators And Escalators and explain their basic working system with sketches. (04)
- Q.2** (a) Explain the following topics with relevant sketches; (Any 2) (06)
- (1) Scaffolding
  - (2) Shoring
  - (3) Kitchen working triangle
  - (4) Day Lighting design Concept
- (b) Make relevant sketches (Any one) (02)
- (1) Double skin partition wall
  - (2) Double scaffolding
- Q.3** (a) Enlist and explain with sketches- Stages of RCC construction. (04)
- (b) Write a short note on different types of cavity wall with relevant sketches. (04)
- Q.4** (a) Write short note on following; (any 2) (04)
- (1) Hollow blocks
  - (2) HVAC
  - (3) False ceiling

**OR**

- (a) Explain difference between Air conditioners and Air coolers. (04)
- (b) Explain Partition wall and Paneling. Elaborate various materials used for light weight partitions with sketches. (04)
- Q.5** (a) Design a Toilet with changing room (in size of 3m X 5m) attached to the Master bedroom at first Floor of a residential Bungalow. Consider suitable entry and ventilation, drainage and water supply for the toilet. (08)
- Sketch or draft a proportionate plan, section, suitable details of fixtures and fittings in relevant scale.

**OR**

- (a) Design a Kitchen with storage room (in size 3m X 5m) cabinets below platform and also above platform. Assume ventilation, water supply and drainage connection etc; Draw plan, Section and details showing fittings, fixtures and services in suitable scale. (08)

\*\*\*\*\*