Seat No.: _____ Enrolment No._____

# 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)**

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