

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)**
