

GUJARAT TECHNOLOGICAL UNIVERSITY
BARCH – SEMESTER-IV – • EXAMINATION – SUMMER 2015

Subject Code: 1045002

Date: 11/05/2015

Subject Name: BUILDING CONSTRUCTION IV

Time: 10:30 AM – 1:30 PM

Total Marks: 40

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Design a Toilet of 3x2mt area, which is attached to master bedroom of a residential bungalow. Two walls are external walls. Assume suitable entry and ventilation, drainage and water supply for the toilet. Sketch or draft plan, one relevant section, with suitable details of fixtures and fittings proportionately in relevant scale. **08**
- Or
- (a)** Design a kitchen of 3x4mt area. One side is open to garden and wash area, one side is attached with store, one side is attached to living room, and one side is open to dining area. Sketch or draft plan, one section through platform, with suitable details of working triangle proportionately in relevant scale. **08**
- Q.2 (a)** Write with examples the use of elevators and escalators. Also explain the basic working system with sketches **04**
- (b)** Design the concept for electric layout for a typical Toilet or kitchen. **04**
- Or
- Explain Principles of Electric installation in small scale buildings. **04**
- Q.3 (a)** Explain purpose of false ceiling. Describe different materials used for false ceiling. **04**
- (b)** What is partition wall? Mention and elaborate different materials used for light partitions. **04**
- Q.4 (a)** Assume an architect's cabin of 4mt x 5mt and design a false ceiling for the same. (Proportionate sketch/ draft). Draw plan and details of same. Also specify the material used in the False ceiling **08**
- Or
- (a)** Design a partition wall between Kitchen and dining space of residential area. Length of the wall is 2.5mt. Assume appropriate height. Proportionate Sketch/ draft plan and section with details. also specify the material used in the wall. **08**
- Q.5 (a)** Define following with sketches (any 2) **04**
- i. Scaffolding
 - ii. Shoring
 - iii. Formwork

- (b) Write short notes on different types of cavity wall with sketches? **07**
- Q.6** (a) Write a short notes on hollow blocks and its sizes. Explain with sketches. **04**
- (b) Explain difference between Air conditioner and Air coolers. **04**
- Q.7** (a) Make relevant sketches (any 4) **08**
1. Formwork for wall
 2. Double scaffolding
 3. Double skin partition wall
 4. Day lighting design concept
 5. Types of kitchen platform
 6. Kitchen working triangle
