

GUJARAT TECHNOLOGICAL UNIVERSITY
B. ARCH - SEMESTER V – • EXAMINATION – SUMMER 2015

Subject Code: 1055002**Date: 05/05/2015****Subject Name: BUILDING CONSTRUCTION V****Time: 2:30 PM – 5:30 PM****Total Marks: 40****Instructions:**

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

- Q.1 (a)** Write Explanatory notes of the following with sketch (any 2) : **08**
i. Raft Footing
ii. Combined Footing
iii. Eccentric Footing
- Q.2 (a)** What is the meaning of the term pile foundation? Enumerate the situation demanding the use of pile of as foundation. **04**
(b) Mention the advantages & disadvantages of cast – in – situ and pre cast concrete piles. **04**
- Q.3 (a)** Explain briefly single rain forced and doubly rain forced R.C.C slabs constructions. **04**
(b) What are the chief ingredients of main cement concrete? **04**
- Q.4 (a)** Sketch the various types of welding joints and mention advantages of welding over riveting. Also mention methods welding commonly adopted. **08**
- Q.5 (a)** Make sketches of following connections. **08**
i. Beam to Beam
ii. Beam to column
iii. Column to column
iv. Column to foundation
- Q.6 (a)** Mention the advantages of steel roof truss over timber truss. **04**
(b) Mention the advantages of riveted connections. **04**
- Q.7 (a)** what is meaning curing? Why is it essential to cure the concrete? And mention the various methods adopted commonly in curing. **08**
