

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BArch- SEMESTER– 1 EXAMINATION – SUMMER 2016**

**Subject Code: 1015003**

**Date: 26/05/2016**

**Subject Name: Building Construction - I**

**Time: 02.30PM – 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. Supplement your answer with a neat sketch wherever necessary

- Q.1** Explain the following terms in brief and draw a neat sketch for the same **08**  
( For any four out of Six)  
1. King Closure                      2. Stretcher                      3. Header  
4. Frog                                  5. Coping                      6. D.P.C.
- Q.2** (a) Write an explanatory note on the advantages and disadvantages of Mud construction **04**  
(b) Enlist the joints used in Timber construction and draw a neat sketch to explain the same (any four) **04**  
**OR**  
(b) Write an explanatory note on the of Bamboo construction. **04**  
)
- Q.3** Draft to a suitable scale; a typical 230 MM thick Brick wall section of a load bearing single story structure from Foundation to Parapet having a RCC slab. Show all necessary levels and label all components. **08**  
**OR**
- Q.3** Draft to a suitable scale; a wall section for a compound wall from foundation. The wall is 350 MM thick and having square rubble un-coursed masonry. Label all components. **08**
- Q.4** (a) Write an explanatory note on Stone masonry covering various types of masonry. **04**  
(b) Enlist any four techniques used for Mud construction and explain them in brief. **04**  
)  
**OR**
- Q.4** (a) Write a short-note on RCC frame structure explaining the function of its various components. **04**  
(b) Define the term “Bond” in reference to Brick Masonry. **04**  
) Differentiate between English bond and Flemish Bond.
- Q.5** Draft to a suitable scale; Plan and Elevation of a right angle (“L”) junction of one and half brick wall in Flemish Bond showing Min. 3 Odd and 3 Even courses **08**  
**OR**
- Q.5** Draft to a suitable scale; Plan and Elevation of a right angle (“L”) junction of one and half brick wall in English Bond showing Min. 3 Odd and 3 Even courses **08**

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