

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B. ARCH - SEMESTER- I • EXAMINATION – WINTER 2017**

**Subject Code:1015003**

**Date:28-12-2017**

**Subject Name:Building Construction-I**

**Time:10.30 AM TO 1.30 PM**

**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** Attempt any 2 with relevant sketches **(08)**

(a) Define the following:

- (i) Stretcher
- (ii) Lap
- (iii) Queen Closer
- (iv) King Closer

- (b) (i) Adobe technique of mud construction  
(ii) Enlist the types of stones with examples

- (C) (i) Classification of Trees  
(ii) Macro structure of Timber

**Q.2** (a) Draw isometric view of 3/4th Bat and Double Bullnose brick **(04)**

(b) Write short note on any two: **(04)**

- 1) Qualities of good brick
- 2) Characteristics of bamboo
- 3) Give classification of rocks

**Q.3** (a) Write a short note of **(08)**  
Manufacturing process of bricks

OR

(a) Defects in timber.

**Q.4 (a)** Draw plans, elevation and view of 230 mm thick brick wall in English bond **(08)**

**OR**

**(a)** Draw plans, elevation and view of 230 mm thick brick wall in Flemish bond

**Q.5** Attempt any two **(08)**

(a) Compare - Load Bearing Structure and Frame Structure

(b) Sketch different types of joinery between bamboos

(c) Sketch any 2 types of the Ashlar stone masonry

(d) Define Brick bond & Enlist its types.

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