Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BARCH – SEMESTER-I– • EXAMINATION – SUMMER 2015

Subject Code: 1015003 **Date: 15/05/2015**
Subject Name: BUILDING CONSTRUCTION-I
Time: 2:30 PM – 5:30 PM **Total Marks: 40**

Instructions:

1. **Attempt ANY FOUR questions.**
2. **Question 1 & 2 are compulsory.**
3. **Make suitable assumptions wherever necessary.**
4. **Figures to the right indicate full marks.**

Q1 (a) Draw a 230 mm thick wall section of a single storied building and denote all the parts from top to bottom. **[5]**

(b) Give classification of rocks with examples of types of stones. **[3]**

(c) Write a short note on Treatments for bamboo. **[2]**

Q2 Sketch in proportion / Draft to Scale 1:10

(a) Draw a plan & Elevation of right angle corner ("L") Junction of one and half brick (350mm thick) wall in Flemish bond – showing odd and even courses. **[5]**

(b) An elevation and section of 350 mm thick flint rubble masonry. **[5]**
Size of the wall panel in elevation. Height – 1500mm and Width – 1000 mm.

Q3 (a) Define: **(ANY FIVE)** **[5]**

1. King closer
2. Sap wood
3. Ashlar masonry
4. Pointing (brick work)
5. Igneous rocks
6. Framed structure (RCC)
7. Lap Joint in Brick work

(b) Explain with sketches sawing of timber. **[3]**

(c) Sketch and explain precautions required for Mud Construction. **[2]**

Q4 (a) Write Short note (**ANY TWO**) **[10]**

1. Qualities of a good brick
2. Adobe technique of mud construction
3. Defects in timber
4. Load bearing structure

Q5 (a) Enlist and sketch various types of bricks. **[5]**

(b) Explain briefly types of surface finishes on stone. **[5]**

Q6 (a) Draw plan and elevation of 230 mm thick brick wall in English bond. **[5]**

(b) Attempt **ANY TWO** of the following with relevant sketches: **[5]**

1. Composition of a Good Brick Earth.
2. Write comparison between clamp burning and kiln burning.
3. Mention various tests subjected to bricks.

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