Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE Arch. – SEMESTER – I • EXAMINATION – WINTER 2013

Subject Code: 1015003 **Date: 17-12-2013**

Subject Name: Building Construction - I

Time: 10:30 am - 01:30 pm **Total Marks: 40**

Instructions:

1. **Attempt any four questions.**
2. **Question 1 & 2 are compulsory questions**
3. **Make suitable assumptions wherever necessary.**
4. **Make suitable sketches wherever required.**
5. **Figures to the right indicate full marks.**
6. **Each question carry equal marks (20 marks)**

Q.1	(a)	Draw a 230 mm thick wall section of a single storied building and denote all the parts from top to bottom	**05**
	(b)	Draw an isometric view of Rat trap bond and Header bond	**03**
	(c)	Draw isometric view of 3/4th Bat and Double Bullnose brick	**05**
Q.2	(a)	Write short note on any two: 1) Qualities of good brick 2) Characteristics of bamboo 3) Macro-structure of a tree 4) Adobe technique of mud construction	**15**
	(b)	Give classification of rocks with examples of types of stones	**03**
	(c)	Define a brick bond and enlist various types of brick bonds	**02**
Q.3	(a)	Draw plans and elevation of 230 mm thick brick wall in English bond	**15**
	(b)	Sketch different types of joinery between bamboos	**03**
	(c)	Sketch details of stone cladding	**02**
Q.4	(a)	Write a short note on Manufacturing process of brick	**15**
	(b)	Write a short note on Seasoning of timber	**03**
	(c)	Write a short note on Treatments for bamboo	**02**
Q.5	(a)	Sketch elevations of any 5 types of un-coursed stone masonry	**15**
	(b)	Define any 3 of the following: 1) Ashlar masonry 2) Stonework 3) Natural stone 4) Mason	**03**
	(c)	Sketch any 2 types of the coursed stone masonry	**02**
Q. 6	(a)	Draw widening and angled joinery details of timber	**15**
	(b)	Explain with sketches Sawing of timber	**03**
	(c)	Write short note on Defects in timber	**02**
Q. 7	(a)	Draw isometric view of 350mm thick wall in Double Flemish bond	**15**
	(b)	Define following (any 3) 1) Veneer 2) Masonry 3) Course 4) Framed Structure 5) Pointing	**03**
	(c)	Sketch & explain precautions required for Mud construction	**02**

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