

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-III (NEW) - EXAMINATION – SUMMER 2017****Subject Code: 2130607****Date: 13/06/2017****Subject Name: Building Construction****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	Short Questions	14
	1 Write the function of frog.	
	2 What is composite masonry?	
	3 Give standard and nominal size of brick.	
	4 What is cornice?	
	5 Explain about rapid hardening cement.	
	6 What is raking shores with uses?	
	7 What is coping?	
	8 Uses of portland pozzolana cement.	
	9 What is lintel and explain level for lintel.	
	10 What is jamb?	
	11 What is rebate?	
	12 Explain about louvers.	
	13 Explain about hollow concrete blocks.	
	14 Explain about trade and riser with standard size.	
Q.2	(a) Explain about pre-cast and cast-in situ construction.	03
	(b) Explain any two types of arches based on material	04
	(c) Write the methods of boring for subsurface investigation.	07
	OR	
	(c) Sketch for(1) Flemish bond for 20 cm thick brick masonry wall in plan.(2) Ashlar chamfered fine tooled wall in elevation.	07
Q.3	(a) Write a short note on hollow masonry.	03
	(b) Write in brief about acoustical construction.	04
	(c) Classify various types of windows based on nature of operation or opening and explain any two in brief.	07
	OR	
Q.3	(a) Write a short note on cavity wall.	03
	(b) Discuss anti termite treatment for a building.	04
	(c) Enumerate types of materials used for construction of floor base and flooring. Explain factors that affect the selection of flooring materials.	07
Q.4	(a) Explain about timber flooring.	03
	(b) Explain about roof covering material.	04
	(c) Sketch different types of steps and dog legged staircase plan with labeling.	07
	OR	
Q.4	(a) Draw a label diagram of typical door.	03
	(b) Draw a neat sketch of jack arch floor of bricks.	04

- (c) Define underpinning. Explain pit method of underpinning with sketch. **07**
- Q.5** (a) Define scaffolding and its component parts . **03**
(b) Explain fire resisting building materials **04**
(c) Explain about principle and construction of Green building. **07**
- OR**
- Q.5** (a) What is included in wall finishes work for a building. **03**
(b) Discuss various principles to be followed for providing damp proofing. **04**
(c) Define the following in relation of roof. (1) Pitch (2) Ridge **07**
(3) Valley (4) Common rafter (5) Purlin (6) Eave board
(7) Gable.
