

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- SEMESTER-III (NEW) EXAMINATION – WINTER 2020****Subject Code:2130607****Date:08/03/2021****Subject Name:Building Construction****Time:10:30 AM TO 12:30 PM****Total Marks:56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Define mortar. Explain cement and lime mortar **03**  
 (b) Write the difference between stone masonry and brick masonry. **04**  
 (c) Explain wash boring with sketch **07**
- Q.2** (a) What are the purposes of site Exploration? **03**  
 (b) What do you understand by “Mat Foundation”? **04**  
 (c) What remedial measures would you adopt for causes of failure of foundation? **07**
- Q.3** (a) What is water cement ratio? How it affects on workability of concrete? **03**  
 What do you understand by grillage foundation? Draw a typical sketch for steel  
 (b) grillage foundation for a steel section. **04**  
 (c) Define **07**  
 1. Corbel 2.Jambs 3.Frog 4. Queen closer 5. King closer 6.Coping  
 7.Stretchers
- Q.4** (a) What you understand by “cavity wall”? **03**  
 (b) Draw a typical vertical section of a wall through openings and label. **04**  
 (c) Describe the following staircase with sketch. **07**  
 a) Doglegged staircase  
 b) Geometrical stair
- Q.5** (a) Explain various properties of concrete. **03**  
 (b) Differentiate between Fixed and Pivoted windows. **04**  
 (c) Differentiate between pre-cast and cast in situ concrete construction. **07**  
 Write advantages and disadvantages of pre-cast cast construction.
- Q.6** (a) Define the following with figure in relation to stair: **03**  
 a) Scotia b) Baluster c) Landing  
 (b) Describe Jack arch flooring with sketch. **04**  
 (c) What are the factors affecting the selection of size, shape, location and number **07**  
 Doors in building?
- Q.7** (a) What is difference between plastering and pointing? **03**  
 (b) Describe the Queen post roof truss with figure. **04**  
 (c) Define Shoring and underpinning. Explain any one method of each. **07**
- Q.8** (a) Write various types of pointing **03**  
 (b) Briefly explain Defects in painting **04**  
 (c) Write a note on Anti-termite Treatment. **07**

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