

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-IV • EXAMINATION – WINTER 2013

Subject Code: 140602**Date: 23-12-2013****Subject Name: Building Construction****Time: 02:30 pm to 05:00 pm****Total Marks: 70****Instructions:**

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

- Q.1 (a)** Briefly describe the causes of failure of foundation and their remedial measures. **07**
- (b)** Describe Ashlar masonry with its various categories. **07**
- Q.2 (a)** Explain the following terms with figures **07**
 (1) King closer (2) Queen closer (3) Header (4) Strecher (5) Cornice (6) Coping (7) String course
- (b)** Describe requirements of good stairs explaining each requirement clearly. **07**
- OR**
- (b)** Describe auger boring and wash boring with a sketch of each. **07**
- Q.3 (a)** Describe merits of English bond and draw plan of 1 brick wall English bond for odd and even course. **07**
- (b)** Write a detailed note on composite masonry. **07**
- OR**
- Q.3 (a)** Write a short note on (1) Pre-cast construction (2) Cast in situ construction **07**
- (b)** Explain various rubble masonries with a figure of each. **07**
- Q.4 (a)** Explain the construction of following doors with their suitability. **07**
 (1) Lugged and braced door
 (2) Glazed door
 (3) Paneled door
- (b)** Write a short note on (1) Location of doors and windows (2) Metal windows **07**
- OR**
- Q.4 (a)** Describe various types of stairs with figure explaining suitability of each. **07**
- (b)** Describe factors affecting selection of flooring material **07**
- Q.5 (a)** Write a short note on (1) Timber flooring (2) Reinforced concrete floor **07**
- (b)** Write a short note on (1) Types of scaffolding (2) Under pinning **07**
- OR**
- Q.5 (a)** Define the following terms in relation to roof with figure **07**
 (1) Ridge (2) Common rafter (3) Purlin (4) Cleat (5) Eaves Board
- (b)** Write advantages and disadvantages of flat roof. Write short note on drainage of roofs **07**
