

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV • EXAMINATION – WINTER • 2014****Subject Code: 140602****Date: 29-12-2014****Subject Name: Building Construction****Time: 02:30 pm - 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) Write a note on various components of a building. **07**
(b) What are the different methods for site exploration? Explain any two methods in detail. **07**
- Q.2** (a) Write the difference between rubble masonry and ashlar masonry. **07**
(b) Discuss various factors affecting location of doors and windows. **07**
- OR**
- (b) 1) Differentiate between Fixed window and pivoted window **07**
2) Explain with sketch Framed and panelled door.
- Q.3** (a) Define the following. **07**
1) Winders 2) Pitch. 3) Frog. 4) Queen closer. 5) Lintel. 6) Spandril. 7) Cornice.
(b) Describe dog-legged stair and bifurcated stair with neat sketch. **07**
- OR**
- Q.3** (a) Discuss various factors affecting the selection of flooring material. **07**
(b) What are the requirements of good plaster and explain various defects in plastering. **07**
- Q.4** (a) Write a short note on **07**
1) Needle scaffolding. 2) Pit method for underpinning.
(b) What is composite masonry? Write advantages of composite masonry and enlist different types of composite masonry. **07**
- OR**
- Q.4** (a) Discuss in brief the causes of failure of foundation. **07**
(b) What are the various methods of proportioning concrete? Explain any two in detail. **07**
- Q.5** (a) What are special treatments in Building? Explain any one in detail. **07**
(b) Discuss in brief general principles to be observed for providing damp proofing. **07**
- OR**
- Q.5** (a) Discuss in brief the method of construction of concrete jack arch flooring. **07**
(b) Write short note on "Thermal Insulation in Building" **07**
