

GUJARAT TECHNOLOGICAL UNIVERSITY**B. E. Sem-IV Examination June- 2011****Subject code: 140602****Subject Name: Building Construction****Date: 08/06/2011****Time: 10.30 am – 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.

- Q.1** (a) 1. State the purpose of soil exploration. **07**
 2. Enlist the methods of site exploration. Explain any one in detail.
- (b) 1. Define mortar. Explain cement and lime mortar. **07**
 2. Write a note on random rubble built to course stone masonry.
- Q.2** (a) 1. Define the following terms: **07**
 (i) closer, (ii) quoin, (iii) coping
 2. Differentiate between English bond and Flemish bond
- (b) 1. Explain the reinforced brick lintel with sketch. **07**
 2. Define the terms: (i) springing points (ii) centering
- OR**
- (b) What are the functions of water in concrete mix? Describe the properties of water which are necessary to be used to get good concrete. **07**
- Q.3** (a) Differentiate between: **07**
 1. Panelled doors and Glazed doors
 2. Skylight window and Lantern light windows
- (b) State and explain the circumstances under which the following types of stairs can be provided : **07**
 (i) half turn geometrical stair (ii) dog-legged stair
- OR**
- Q.3** (a) Write the points to be kept in mind while fixing the position of doors and windows. **07**
- (b) Explain with the help of sketches the following terms: **07**
 (i) winders (ii) nosing (iii) landing
- Q.4** (a) Explain with the help of sketch the method of constructing timber flooring. **07**
 (b) Compare Steel roof trusses and Timber roof trusses **07**
- OR**
- Q.4** (a) Explain in brief the factors that affect the selection of a floor finish. **07**
 (b) State briefly the essential requirement of a good roof. **07**
- Q.5** (a) What does it mean by shoring? Enlist the types of shores and describe in brief any one. **07**
 (b) State the general principles that should be observed for providing damp proofing (DPC) **07**
- OR**
- Q.5** (a) What is meant by scaffolding? Discuss the essential requirements of it. **07**
 (b) Discuss in brief various types of thermal insulating materials. **07**
