

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-IV Examination June- 2010

Subject code: 140602

Date: 18 / 06 /2010

Subject Name: Building Construction

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) Define : (1) Scotia (2) Reveal (3) Corbel (4) Buttress (5) Durability (6) Horn (7) Thermal Conductivity 07
- (b) Enlist different methods used for site exploration. Explain Seismic Refraction Method 07
- Q.2 (a) What are the basic characteristics of black cotton soil ? What precautions should be taken during foundation construction in black cotton soil ? 07
- (b) Explain Brick Cavity Wall with sketch. 07
- OR**
- (b) Explain steel grillage foundation with all details. 07
- Q.3 (a) Write short note on random rubble masonry and ashlar chamfered masonry. 07
- (b) Explain relieving arch and horse shoe arch. Discuss different causes of failures of arches. 07
- OR**
- Q.3 (a) What is water-cement ratio ? How it affects on strength and workability of concrete ? 07
- (b) Explain common acoustical defects and suggest remedial measures. 07
- Q.4 (a) Explain Venetian door and Collapsible steel door. 07
- (b) Write short note on Escalator with sketch. 07
- OR**
- Q.4 (a) What factors should consider for selecting type, shape and size of window ? 07
- (b) Give merits and demerits of flat and pitched roof. 07
- Q.5 (a) Describe various types of pointing. 07
- (b) What are the basic characteristics of an ideal paint ? 07
- OR**
- Q.5 (a) What is underpinning ? Explain Pit method for the same. 07
- (b) Explain anti – termite treatment with details. 07

\*\*\*\*\*