

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV (OLD) - EXAMINATION – SUMMER 2018

Subject Code:140602

Date:19/05/2018

Subject Name:Building Construction

Time:10:30 AM to 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) Describe components of building in brief. **07**
(b) What are the different methods of site exploration? Write purposes of site investigation. **07**
- Q.2** (a) What is cavity wall? Write purposes of cavity wall. **07**
(b) What are the different types of foundation in black cotton soil? Explain any one in detail. **07**
- OR**
- (b) Write advantages and disadvantages of precast and cast-in-situ concrete. **07**
- Q.3** (a) State different types of bonds in brick masonry. Explain English bond in detail. **07**
(b) Define the following. **07**
1) Header. 2) Pitch. 3) Frog. 4) Closer. 5) Lintel. 6) Coping. 7) Cornice.
- OR**
- Q.3** (a) Define stair and explain requirements of good stair. Give the classification of stair. **07**
(b) What are the various methods of proportioning concrete? Explain any two in detail. **07**
- Q.4** (a) What are the points to be kept in view while locating Doors and Windows? Explain any one Door in detail. **07**
(b) Describe different kinds of rubble masonry with neat sketches. **07**
- OR**
- Q.4** (a) What is composite masonry? Give various types of it and explain with sketch brick facing and concrete backing wall. **07**
(b) Distinguish between lintel & an arch. Draw a neat sketch of an arch and show on it various technical terms used in its construction. **07**
- Q.5** (a) Write definition and types of shoring, scaffolding and underpinning. **07**
(b) What are the special treatments for buildings? Explain any one in detail. **07**
- OR**
- Q.5** (a) List various types of plaster finishes. Also, write various special materials used in plastering and various defects in plastering. **07**
(b) What are the causes of fire? What precautions measures taken to minimize the danger of fire? **07**
