

**GUJARAT TECHNOLOGICAL UNIVERSITY****BA - SEMESTER-V EXAMINATION – WINTER 2018****Subject Code:1055002****Date:27/11/2018****Subject Name:Building Construction-V****Time:10:30 AM TO 01:30 PM****Total Marks: 40****Instructions:**

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

- Q.1** Explain retaining wall with detail sketch. Write safety factor against overturning of retaining wall. Explain different types of stresses working on it. **08**
- OR**
- Q.1** Explain pile foundation with detail sketch. Write criteria of selection of pile for particular soil condition.
- Q.2** Write short notes. (Any Four ) **08**
1. PCC elements
  2. RCC elements
  3. Precast elements
  4. Slab
  5. Beam
  6. Column
- OR**
- Q.2** What are methods to determine the load carrying capacity of a pile? What is meant by single-under reamed pile explain it in detail. **08**
- Q.3** Explain different kind of footing for a steel column. Draw grillage foundation for a steel column. **08**
- OR**
- Q.3** Explain lacings, battening and bracings with detail sketch.
- Q.4** Explain with sketch column to column connection, column to beam connection. **08**
- OR**
- Q.4** Explain with sketch two way slab, one way slab, cantilever and baffled slab.
- Q.5** Write short notes on following (Any Four ) **08**
- Vault
  - Built up column
  - Built up beam
  - Barrel vault
  - Deep foundation
  - Shallow foundation

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