

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
