

GUJARAT TECHNOLOGICAL UNIVERSITY
D.ARCH SEMESTER-III -EXAMINATION-SUMMER 2018

Subject Code: 3336202**Date: 20-11-2018****Subject Name: Construction Technology- III****Time: - 10:30 AM TO 12:30 PM****Total Marks: 50****Instructions:**

- 1. Attempt all the questions.**
- 2. Draw neat sketches wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q1 (a) Write short note on: **10**
1. Bearing piles and Friction piles.
 2. Brick-layer's Scaffolding
 3. Combined footings
 4. Echoes
 5. Underpinnig
- Q2 Answer the Any two: **10**
- (a) Describe in detail the Raking shore. Also show neat sketchwith its components.
 - (b) What do you understand by the term 'Raft or Mat Foundation'? What is the needorbenefits of Raft or Mat foundation?
 - (c) Write a Short note on the acoustical design of Auditorium.
- Q3 (a) Describe the following with neat sketche with its components: (Any Four) **10**
1. Cantileverslabs and sloping RCC roof with reinforcement details.
 2. Grillage foundation.(Plan and section)
 3. Flying Shore.
 4. Timber Formwork for square RCC column. (Plan, elevation and section with reinforcement details.
 5. Expansion joint in loadbearing walls.
- Q4 Answer the Any two: **8**
- (a) Describe and compare in detail. One way slab and two way slab. Also draw neat sketch.
 - (b) Write short note on Domes.Also draw neat sketches.
 - (c) Discuss the types of Vaults.
- Q5 (a) Draw to a suitable scale: Expansion joint in R.C.C framed structure building. Draft typical building section. Enlarge details for any two locations at roof, ground floor slab and at foundation level.Label all the components. **12**
- (b) Draw to a suitable scale: Form-work for RCC slab and RCC circular column. Draft typical section and label all the components.
