

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ARCHITECTURE - SEMESTER- IV • EXAMINATION – SUMMER 2018

Subject Code:3346202

Date: 28/04/2018

Subject Name: Advanced Construction Technology

Time:10:30 to 12:30 PM

Total Marks: 50

Instructions:

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

- Q.1** (a) Write Short note on various use and properties of PVC and FRP materials in building construction. **05**
(b) Write short note Tensile structures with examples. **05**
- Q.2** Answer any **Two**. **10**
(a) Briefly explain Waffle slab its types and draw necessary sketches.
(b) Write short note on Pneumatic structures with examples and sketches.
(c) Discuss geodesic domes with suitable examples. Draw necessary sketch.
- Q.3** (a) Draw Steel doors for garage or workshop with plan, section and elevation. **06**
Mention various parts, materials and details. (Opening size 3M x 4M)
OR
(a) Briefly explain Precast and Prestressed concrete components in building construction. Draw necessary sketch. **06**
- Q.4** (a) Write short note on properties and use in building construction of. (Any **Four**) **12**
1) Polycarbonates
2) Aluminum composite panel
3) Water proofing elements
4) Gypsum
5) Plaster of Paris
- Q.5** (a) Draft or sketch Structural glazing on outer side of a building. Starting from ground floor plinth level up to first floor slab level. Assume 3.6m width and 3.3m floor to floor height. (Draw Plan, section, elevation and necessary details with suitable scale. Mention various parts and material.) **12**
OR
(a) Draft or sketch Plan, section and elevation of sliding folding door/partition with necessary details. Opening size 4M x 2.4M. (Draw Plan, section, elevation and necessary details with suitable scale. Mention various parts and material.) **12**
