

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

D.ARCH.-II - SEMESTER-IV • EXAMINATION – SUMMER 2017

**Subject Code:3346202**

**Date: 29/04/2017**

**Subject Name: Advanced Construction Technology**

**Time: 10:30 AM TO 12:30 PM**

**Total Marks: 50**

**Instructions:**

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

- Q.1 Answer any two. 12
- (a) Write a short note on type of PVC material and its uses with appropriate sketches. Explain the process of polymerization.
  - (b) Write a note on precast concrete. Write down advantages with suitable example and draw a sketch for each example.
  - (c) Enlist and provide brief on the type of partition. Draw sketches with appropriate example.
- Q.2 Answer any two. 12
- (a) Enlist the type of glasses and it's used in construction industry. Describe basic properties of glass.
  - (b) Write a note on shell structure with appropriate examples with necessary sketches.
  - (c) Describe designing criteria and advantages and disadvantages of flat slab. Explain and draw its types.
- Q.3 Answer any two. 12
- (a) Describe designing criteria and advantages and disadvantages of waffle slab. Draw a sketch where ever is required.
  - (b) Explain basic criteria and types of tensile structure. Write a short note on each type with applicable example.
  - (c) Explain the component and affecting designing criteria of space frame.
- Q.4 Answer any two. 14
- (a) Explain fixing detail of curtain wall and structural glazing with its components and required materials.
  - (b) Write a note on pneumatic structure and provide suitable examples with its types.
  - (c) Explain in detail. Geodesic dome as a shell structures.

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