

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2180613

Date: 06/05/2017

Subject Name: Glass Facade Engineering(Departmental Elective - III)

Time: 10:30 AM to 01:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. IS code 875 (part I, II, III) 1987 if necessary for design.

- Q.1** (a) Enlist different types of the glass and their applications. **07**
(b) Give steps for manufacturing of float glass. **07**
- Q.2** (a) What is U-value and solar factor for glass facade. **07**
(b) Discuss the factors affecting on selection of Glass for Building. **07**
- OR**
- (b) Write about Green Building Rating. Give considerations for Green Building Rating. **07**
- Q.3** (a) Describe the different Engineering properties of glass facade for construction. **07**
(b) Which are the factors considered for to decide the thickness of glass for window panels? Explain any one in detail. **07**
- OR**
- Q.3** (a) Compare linear theory to non linear theory for analysis for glass facade. **07**
(b) Give reasons of Glass plate failure. **07**
- Q.4** (a) Write short note on: Point fixed Glazing. **07**
(b) Which are the innovative designs in Glass facade? Give detail of any one. **07**
- OR**
- Q.4** (a) Write in detail about glass support system. **07**
(b) Describe about Brackets, Fixings and Anchors for finishes of glass construction. **07**
- Q.5** (a) Which are the different tests for glass facade? **07**
(b) Find out the required thickness for, tempered glass panel of size 3.0m ×1.5 m supported on four sides for a 60 m high office building located in Delhi in terrain category II. The plan of building is rectangular with the size as 50m×60 m. The permeability of building is between 5 % to 20 % . **07**
- OR**
- Q.5** (a) Discuss the Specifications and Applications for Laminated glass. **07**
(b) Write Short note on: On situ test for Glasses. Explain any one test in detail. **07**
