

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VIII(NEW) EXAMINATION - SUMMER 2019** 

Subject Code:2180613	Date:13/05/2019
<b>Subject Name: Glass Facade Engineering</b>	
Time:10:30 AM TO 01:00 PM	Total Marks: 70
Instructions:	
1 Attempt all questions	

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

(c) What are the advantages and disadvantages of Glass?  Q.2 (a) What is the role of Glass in Green building? (b) Give reasons of Glass plate failure. (c) What is Green building certification and why it is required?  OR (c) Write in detail type of glazing system can be used in structural glass  Q.3 (a) What is U-value and solar factor for glass facade. (b) What is an acoustic glass window? (c) How to find out the net design and pressure in glass?  OR  Q.3 (a) What is the criterion for thickness of glass in sky scraper? (b) Explain thermal shock in Glass. (c) Write principal design criteria for the seismic design.  Q.4 (a) Write short note on :Point fixed Glazing. (b) What are the chemical properties of Glass? (c) What are the differences between structural glazing and curtain wall?  OR  Q.4 (a) Write Short note on :penetration test for Glasses (b) Write the equations for the design of unit skylights rated for performance grade for both positive and negative design pressure.		
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pressure.	Write the equations for the design of unit skylights rated for	4
pressure.	performance grade for both positive and negative design	
1		
(c) How to calculate while loads from while speed.	How to calculate wind loads from wind speed?	7
Q.5 (a) How thermal breakage occur?	How thermal breakage occur?	3
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Q.5 (a)		for construction?  Write advantages of fire resistance glass. What are the advantages and disadvantages of Glass?  What is the role of Glass in Green building? Give reasons of Glass plate failure. What is Green building certification and why it is required?  OR  Write in detail type of glazing system can be used in structural glass  What is U-value and solar factor for glass facade. What is an acoustic glass window? How to find out the net design and pressure in glass?  OR  What is the criterion for thickness of glass in sky scraper? Explain thermal shock in Glass. Write principal design criteria for the seismic design.  Write short note on :Point fixed Glazing. What are the chemical properties of Glass? What are the differences between structural glazing and curtain wall?  OR  Write Short note on :penetration test for Glasses Write the equations for the design of unit skylights rated for performance grade for both positive and negative design pressure. How to calculate wind loads from wind speed?  How thermal breakage occur?



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Firstranker's Describe about Wood Friest Rankerscand Anchous who Firstranker.com glass construction.

## OR

- What are the precautions during handle, transportation, cutting 3 **Q.5** (a) and fixing the glass.
  - (b) What are the different types of Glazing panels. Explain any 4
  - (c) Discuss the Specifications and Applications for Laminated 7 glass.

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