

Roll No. ....

220442

**4th Sem.**

**Branch : Ceramic**

### Sub. Glass Technology-I

Time : 3 Hrs.

M.M. : 60

## SECTION-A

**Note: Multiple choice Questions. All Questions are compulsory. (6x1=6)**

- Q.1 Primary components of glass batch of \_\_\_\_\_.  
a) Silica                                      b) Sand\  
c) Crystal                                      d) Limestone
- Q.2 Most commercial glasses consist of  
a) Lime    b) Soda  
c) Silica                                         d) All of above
- Q.3 Increase in percentage of silica in glass batch, it will \_\_\_\_\_.  
a) Increase viscosity                      b) Decrease viscosity  
c) Increase density                        d) Decrease density
- Q.4 Broken glass pieces used in tank furnace for the manufacturing of glass is known as  
a) Grog    b) Wood  
c) Pallet                                         d) Cullet
- Q.5 Blow pipe is used to make \_\_\_\_\_.  
a) Flat ware                                    b) Bottle  
c) Hollow                                        d) Allof these

- Q.6 Which of the following is chemical refining agents\  
a)  $\text{Al}_2\text{O}_3$                                       b)  $\text{AS}_2\text{O}_3$   
c)  $\text{Na}_2\text{O}$                                          d) None

### SECTION-B

**Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)**

- Q.7 Soda is network modifier. (True/False)  
Q.8 Glass is Brittle. (True/False)  
Q.9 Increase in soda % in glass decreases the viscosity of glass. (True/False)  
Q.10 Main raw material for glass making is \_\_\_\_\_.  
Q.11 Tank furnace is batch furnace. (True/Fale)  
Q.12 Silica refractory bricks are used in crown of glass tank furnace. (True/Fale)

### SECTION-C

**Note: Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)**

- Q.13 Explain terms Glass former and Glass modifier.  
Q.14 Explain the factors affecting the selection of raw material for glass.  
Q.15 Explain functions of cullet in glass.  
Q.16 Explain the flue system and chimney draft in glass tank furnace.  
Q.17 Define fining agents of glass with example.

- Q.18 Enlist the physical properties of glass.  
Q.19 Describe general properties of glass.  
Q.20 Write short note on Regenerative tank furnace.  
Q.21 Explain impact test of sheet glass.  
Q.22 Name various types of furnaces used in glass industry.

### SECTION-D

**Note: Long answer questions. Attempt any two questions out of three Questions. (2x8=16)**

- Q.23 Differentiate Glass tank furnace and pot furnace.  
Q.24 Explain container glass manufacturing with flow diagram.  
Q.25 Explain fundamental concept of glassy state.