

SECTION-D

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

- Q.23 Define strain. Explain temporary and permanent strain of glass.
- Q.24 Describe the concept and process of tempering of glass.
- Q.25 Explain the various glass decoration techniques. in detail.

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5th Sem / Ceramic Engineering

Subject : Glass Technology - II

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 Strain in glass can be detected with the help of ____.
- a) Weighing b) In water
c) Polari scope d) All of these
- Q.2 Addition of magnesia and alumina will _____ soda lime glass?
- a) Reduces porosity
b) Enhances mechanical strength
c) Improves chemical durability
d) Increases softening temperature
- Q.3 Purpose of annealing of glass is to?
- a) Increase its transparency
b) remove internal stresses
c) Change its color
d) Improve its thermal resistance

- Q.4 _____ is coloring oxide used in glass.
- a) Alumina b) Silica
c) Soda d) Chromium Oxide
- Q.5 Which of the following technologies is commonly used in the glass industry to control particulate matter emissions?
- a) Cyclone separators
b) Electrostatic precipitators (ESP)
c) Catalytic converters
d) Gravity settling chambers
- Q.6 Temperature at which internal strain in glass is developed in few minute is called as
- a) Annealing point b) Softening point
c) Strain point d) None

SECTION-B

- Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)
- Q.7 Borosilicate Glass is used in laboratories. (Lower/Higher)
- Q.8 Temper glass is stronger and more durable than regular glass sheets. (True/False)
- Q.9 Heat resistance glass in a type of glass that is designed to resist thermal shock. (T/F)

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- Q.10 Nickel produces bluish violet when mixed with potash glass. (True/False)
- Q.11 Formula of manganese oxide is _____
- Q.12 _____ is commonly used for glass etching? (sulfuric acid/ Hydrofluoric acid)

SECTION-C

- Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)
- Q.13 Explain the density determination method of glass.
- Q.14 Explain the purpose and process of annealing of glass.
- Q.15 Explain theory of colorization and give colour agents.
- Q.16 Describe the development of thermal stresses in glass.
- Q.17 Describe about heat resistant glass.
- Q.18 Explain the characteristics and applications of borosilicate glass.
- Q.19 Explain effect of composition on glass manufacturing.
- Q.20 Describe the measurement of chemical durability of glass.
- Q.21 Explain the manufacturing and application of laminated glass.
- Q.22 Describe the process of annealing.

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