

No. of Printed Pages : 4

220454

Roll No.

5th Sem.
Branch : Ceramic
Subject : Glass Technology-II

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 Solar glass is primarily used for _____?
a) Building windows b) Solar panels
c) Automotive glass d) Decorative purposes
- Q.2 Annealing is the process of removal _____ from glass.
a) Density b) Viscosity
c) CTE d) Strain
- Q.3 _____ is used to increase viscosity of glass.
a) Alumina b) Silica
c) Sodium oxide d) Chromium oxide
- Q.4 Borosilicate glass is commonly used in which of the following applications?
a) Windows b) Laboratory glassware
c) Light bulbs d) Insulation

- Q.5 What is the process of heating glass to a high temperature to increase its strength called?
a) Annealing b) Tempering
c) Casting d) Blowing
- Q.6 What is the main environmental concern related to glass production?
a) Air pollution b) Water usage
c) Energy consumption d) Waste generation

Section-B

Note: Objective/Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

- Q.7 Viscosity of molten glass decreases with _____ temperature. (Decreasing/Increasing)
- Q.8 Fiber glass is used for heat insulation. (True/False)
- Q.9 Safety glass is used in automobiles. (True/False)
- Q.10 Water also attacks on glass. (True/False)
- Q.11 _____ is commonly used to cut glass? (Hacksaw / Diamond cutter)
- Q.12 Heat absorbing glasses are commonly used in _____. (Automobile windows / Solar panels)

Section-C

Note: Short answer type Question. Attempt any eight questions out of Ten Questions. $(8 \times 4 = 32)$

- Q.13 Explain the concept of glassy state.

- Q.14 Describe the refractories used in glass tank furnace.
- Q.15 Explain the glass toughening process.
- Q.16 Explain the concept of de-colourisation of glass.
- Q.17 Explain process of annealing.
- Q.18 Explain how strain is detected?
- Q.19 Explain the importance of solar energy.
- Q.20 Describe the manufacturing of fiber glass.
- Q.21 Explain in brief manufacturing of safety glass.
- Q.22 Explain how viscosity of glass is determined?

Section-D

Note: Long answer questions. Attempt any two questions out of three Questions. $(2 \times 8 = 16)$

- Q.23 Explain various glass decoration methods.
- Q.24 Describe the process of density measurement of glass.
- Q.25 Explain types of pollution and its controlling measures in glass industry.