

- Q.24 Discuss preparation of chromite refractory.
 - Q.25 Explain fusion cast refractories.
 - Q.26 Explain Fire clay.
 - Q.27 Explain Quartzite.
 - Q.28 Explain Permanent linear change.
 - Q.29 Explain phase diagram.
 - Q.30 List the composition of chromite refractory.
 - Q.31 List the uses of carbon refractory.
 - Q.32 Differentiate between true porosity and apparent porosity.
 - Q.33 Explain Mullite.
 - Q.34 Discuss Permeability.
 - Q.35 Explain Magnesium-Chrome refractories.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x10=20)

- Q.36 List the factors affecting of selection of refractories raw material. Describe occurrence of raw material and manufacturing units in India.

Q.37 Describe the $\text{MgO}-\text{SiO}_2$ phase diagram with help of neat sketch.

Q.38 Describe the testing method of determination of cold crushing strength of a given sample of refractory.

No. of Printed Pages : 4
Roll No.

180443/120443/030443

4th Sem.
Branch : Ceramic
Sub. : Ceramic Refractory Technology-I

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

Q.5 RUL stands for _____.

- a) Refractories Under Load
- b) Refractoriness under Load
- c) Retractoriness Un Load
- d) Refractoriness Upsr Load

Q.6 Insulation is related with ____.

- a) High density
- b) High specific gravity
- c) High porosity
- d) None

Q.7 Thermal conductivity is related with _____.

- a) High density b) High specific gravity
- c) High porosity d) None

Q.8 Acid refractories are attacked by

- a) Basic Slag b) Acid slag
- c) Alumina d) None

Q.9 Zirconium found in Kerala as _____.

- a) Beach sand b) Quartzite
- c) Silica sand d) None

Q.10 The percentage of Alumina is fused alumina refractory is _____.

- a) 20-30% b) 40-50%
- c) 0-10% d) 85-90%

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 $MgCo_3$ is formula of _____

Q.12 Dolomite refractories are basic in nature. (True/False)

Q.13 Drying of refractories are done in hot chamber. (True/False)

Q.14 Spray test determines the _____ of refractories.

Q.15 _____ is a neutral refractory.

Q.16 Drum test determines the _____ of refractories.

Q.17 Magnesia content in dolomite refractory can be _____ percent.

Q.18 Porosity of insulating refractory brick should be low. (True/False)

Q.19 Refractoriness of carbon bricks is about _____ °C.

Q.20 The main purpose of using Refractory materials to retain heat in furnace.

SECTION-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)

Q.21 Classify the fire clay refractories.

Q.22 Explain density.

Q.23 Explain basic refractories.