Q25 Explain Permeability.

Q.26 Explain Zircon.

Q.27 Explain Sillimanite.

Q.28 List the uses of dolomite refractory.

Q.29 Explain phase diagram.

Q.30 List the composition of silica refractory.

Q.31 Explain Grog.

Q.32 Differentiate between acid refractories and basic refractories.

Q.33 Explain chromite.

Q.34 Discuss bauxite.

Q.35 Explain special refractories.

Section-D

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

Q.36 Explain the manufacturing process of fireclay refractory and also list the properties and uses of it.

Q.37 Explain the manufacturing process of alumina refractory and also list the properties and uses of it.

Q.38 Describe the testing method of determination of permanent linear change of a given sample of refractory.

Roll No. .....

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

Time : 3 Hrs. M.M. : 100

SECTION-A

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

Q.1 Refractories are hard to _____.

a) Fuse b) Use

c) Excuse d) None

Q.2 Examples of Basic refractory is

a) Fire clay refractory b) Silica refractory

c) Alumina refractory d) Magnesite refractory

Q.3 Porosity deals with_____.

a) Pores b) Grogs

c) Silica d) Alumina

Q.4 In which test we observe the strength of refractory

a) Permeability b) PCE

c) CCS d) Bulk Density

Q.5 RUL stands for _____.

a) Refractories Under Load

b) Refractoriness Under Load

c) Refractoriness 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 in 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 Formula of magnesite is _____

Q.12 Dolomite refractories are basic in nature. (T/F)

Q.13 Drying of refractories are done in hot chamber. (T/F)

Q.14 Spyay 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. (T/F)

Q.19 Refractoriness of carbon bricks is about _____ ^{o}C.

Q.20 The main purpose of using Refractory material to retain heat in furnace. (T/F)

Section-C

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

Q.21 Explain refractory.

Q.22 Explain porosity.

Q.23 Explain acid refractories.

Q.24 Explain bulk density.