Q.25 Discuss monolithic castable.
Q.26 Discuss coke oven.
Q.27 Explain thoria refractory brick.
Q.28 Discuss preparation of saggars.
Q.29 Discuss refractories used in nuclear power plant.
Q.30 Discuss kiln used in lime industries.
Q.31 Explain crucible.
Q.32 Discuss hot metal mixture.
Q.33 Explain soaking pits.
Q.34 Discuss castables.
Q.35 Explain Silicon nitride.

SECTION-D

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

Q.36 Describe the production, properties and uses of magnesia bricks.

Q.37 Discuss the refractories used in construction of nuclear reactor in nuclear power plant in detail.

Q.38 Describe the production, properties and uses of refractory bricks used in Blast furnace.

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5th Sem. / Ceramic Engg.

Subject:- Ceramic Refractory Technology - II

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The fusion point of Magnsia is

a) 1000°c b) 2800°c
c) 900°c d) 1400°c

Q.2 Which is required in an insulating refractory?

a) Low permeability b) High specific gravity
c) Low porosity d) High porosity

Q.3 What is hearth in a furnace?

a) The electrodes are often called hearth
b) The bowl shaped bottom of the furnace
c) The walls of the furnace
d) The dome shaped roof of the furnace

Q.4 Tank furnace is used to make _____.

a) Steel b) Iron
c) Glass d) Tile

Q.5 In high alumina Mullite refractories, the alumina content is

a) 72% b) 23%

c) 86% d) 48%

Q.6 The main raw material for manufacture of silicon carbide refractories is _____

a) Corundum b) Carborundum

c) Bauxite d) Periclase

Q.7 High density refractory bricks have lower

a) Spalling resistance

b) Slag penetration resistance

c) Fusion point

d) Thermal conductivity

Q.8 Carbon has fusion point of

a) 3600°c b) 600°c

c) 1600°c d) 1200°c

Q.9 Refractory castables are used for

a) Producing monolithic linings

b) Patch work

c) Both a & b

d) None

Q.10 RUL stands for _____.

a) Refractories under load

b) Refractoriness under load

c) Refractores upload

d) None

SECTION-B

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

Q.11 Silica refractory is used in Glass tank furnace. (T/F)

Q.12 _____ furnace is used to make iron. (Blast/Glass)

Q.13 _____ is a furnace to make glass.

Q.14 _____ refractory is used in coke oven.

Q.15 Sintering is densification of shaped refractory bricks. (T/F)

Q.16 Titania refractories are _____ refractory.

Q.17 Monolithics means single layer refractor. (T/F)

Q.18 Spalling resistance is also called as thermal shock resistance. (T/F)

Q.19 Capacity of a refractory brick to withstand-sudden changes in temperature is denoted by the property called TSR. (T/F)

Q.20 Chemical formula for ZIRCONIA is _____.

SECTION-C

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

Q.21 Explain the sintering process of refractories.

Q.22 Explain magnesia refractory with examples.

Q.23 Explain open hearth furnace.

Q.24 Discuss refractories used in iron and steel plant.