

- Q.22 List the properties of fused alumina.
- Q.23 List the uses of saggers.
- Q.24 Discuss preparation of Ceramic fibre refractory.
- Q.25 Explain Insulating castables.
- Q.26 Explain glass wool.
- Q.27 Explain Laddles.
- Q.28 Explain composite material.
- Q.29 Explain Reheating furnace.
- Q.30 Write the uses of abrasives.
- Q.31 List the uses of cermets.
- Q.32 List the uses of fused aluminarefractory.
- Q.33 Explain Mullite.
- Q.34 Discuss Glass Tank furnace.
- Q.35 Explain nuclear power plant.

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 silicon carbide bricks.
- Q.37 Explain the manufacturing process of insulating refractory and also list the properties and uses of it.
- Q.38 Explain the manufacturing process of Zirconia, refractory and also list the properties and uses of it.

(20) (4) 180453/120453/030453

No. of Printed Pages : 4

180453/120453/030453

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5th Sem / Ceramic Subject:- Ceramic Refractory Technology - II

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Sintering means _____
- a) Densification b) Drying
- c) Watering d) None
- Q.2 Silicon carbide has chemical formula of-
- a) CaO b) SiC
- c) SiCr d) FeO
- Q.3 Periclase refractory contains mainly
- a) CaO b) Al_2O_3
- c) MgO d) BeO
- Q.4 Roof of a basic open hearth furnace is lined with _____ bricks.
- a) Graphite b) Fire clay
- c) Silica d) Alumina
- Q.5 Examples of special refractory is _____

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- a) Dolomite refractory b) Quartz refractory
c) Zirconia refractory d) Magnesite refractory
- Q6 Which of the following is an example of special refractory?
- a) Alumina b) Thoria
c) Fire clay d) Silica
- Q.7 Cermets are used in the
- a) hearth of the blast furnace
b) nuclear reactors, missiles & space crafts
c) insulation of high temperature furnaces
d) Roof of electric furnaces
- Q8 $3\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ is
- a) Alumina b) Ball clay
c) Mullite d) Dolomite
- Q.9 The largest consumer of refractories is the-
- a) Cement plant b) Power plant
c) Metallurgical plant d) Fertiliser plant
- Q.10 Insulating refractories having
- a) Low thermal conductivity
b) High thermal conductivity
c) Medium conductivity
d) none

(2) 180453/120453/030453

SECTION-B

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

- Q.11 Formula of Thoria is _____
- Q.12 Mullite refractories are _____ refractory.
- Q.13 Refractoriness of a typical silica brick corresponds to Segar cone number, '34', which is equivalent to a temperature of _____ °C.
- Q.14 Softening point of zirconia bricks is about _____ °C.
- Q.15 Refractory bricks having lower porosity have good strength. (True/False)
- Q.16 SiC refractories are used in making of cutting wheels. (True/False)
- Q.17 CaO content in dolomite refractory can be _____ percent.
- Q.18 Porosity of insulating refractory brick should be high. (T/F)
- Q.19 TSR stands for _____.
- Q.20 Lead content in silica refractory can be as high as _____ percent.

SECTION-C

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

- Q.21 List the uses of mag-chrome refractory.

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