

- b) Refractoriness under load
 c) Refractories upload
 d) None
- Q.6 Which of the following is an example of special refractory?
- a) Alumina b) Thoria
 c) Fire clay d) Silica
- Q.7 Insulating refractories having
- a) Low thermal conductivity
 b) High thermal conductivity
 c) Medium conductivity
 d) none
- Q.8 $3\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2$ 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 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

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)

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- 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. (true/false)
 Q.16 Titania refractories are _____ refractory.
 Q.17 Monolithics means single layer refractor. (true/false).
 Q.18 Spalling resistance is also called as thermal shock resistance. (true/false)
 Q.19 Capacity of a refractory brick to withstand sudden changes in temperature is denoted by the property called TSR. (true/false)
 Q.20 Chemical formula of 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.
 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.

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