

- Q.23 What are the major advantage of gaseous fuel over liquid and solid fuel.
 Q.24 Discuss muffle furnace
 Q.25 Discuss pulverised coal.
 Q.26 List type pyrometers
 Q.27 Write properties and uses of LPG gas.
 Q.28 Discuss flash point.
 Q.29 Discuss ultimate analysis of coal.
 Q.30 List the classification of kiln.
 Q.31 Discuss glass tank furnace.
 Q.32 Explain infrared pyrometer.
 Q.33 Explain manufacturing process of producer gas.
 Q.34 Explain working of regenerators
 Q.35 Define octane number and cetane number.

SECTION-D

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

- Q.36 Describe types of fuels with examples.
 Q.37 Explain working of redwood viscometer with neat diagram.
 Q.38 Describe working of glass tank furnace and refractory used in it.

No. of Printed Pages : 4 180435/120435/030435
 Roll No. /094741

3rd Sem / Ceramic Subject:- Fuels and Furnaces

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Combustion is an _____
 a) Exothermic reaction
 b) Endothermic reaction
 c) Chain reaction
 d) Hydrogen reaction
 Q.2 A bomb calorimeter is used for finding the _____ of solid and liquid fuel.
 a) Dew point b) Calorific value
 c) Melting point d) Strength
 Q.3 Thermocouple is used to measure the
 a) Pressure b) Temperature
 c) density d) calorific value
 Q.4 Which of the following is not a recuperative furnace?
 a) Soaking pit b) Coke oven
 c) Steam boiler d) Reheating furnace

- Q.5 Damper is located
- before ID fan
 - after ID fan
 - top of chimney
 - top of crown
- Q.6 Coal is a _____ fuel.
- solid
 - liquid
 - gas
 - none
- Q.7 Roller kiln is a _____ type of kiln.
- batch
 - continuous
 - both
 - none
- Q.8 CO₂ stands for
- carbon
 - carbon dioxide
 - carbon monoxide
 - carbon trioxide
- Q.9 Fossil fuels are _____
- non-carbon
 - non-renewable resources
 - renewable resources
 - None
- Q.10 Chemical formula of methane is _____
- CH₄
 - CH₃
 - CH₂
 - CH

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 CO stands for _____. (Carbon dioxide/ carbon monoxide)
- Q.12 Stack heat losses can be minimised by controlling the excess air. (True/False)
- Q.13 Shuttle kiln is a batch type of kiln. (True/False)
- Q.14 Tank furnace is used to make _____. (Glass/ Cement)
- Q.15 Crown is a part of kiln/ furnace. (True/False)
- Q.16 Water gas is a source of nitrogen gas. (True/False)
- Q.17 Thermocouple is used to measure temperature. (True/False)
- Q.18 Damper is used to control furnace pressure. (True/False)
- Q.19 Water is a combustible substance. (True/False)
- Q.20 Tunnel kiln is a continuous type of kiln. (True/False)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Give examples of each solid, liquid, and gaseous fuel along with some important uses.
- Q.22 Differentiate between continuous and batch type kiln