No. of Printed Pages : 4 220432
Roll No. .....

3rd Sem.
Branch : Ceramic
Sub.: Fuels & Furnaces

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

Q.1 Calorific value is determined using:

a) Viscometer b) Bomb Calorimeter

c) Manometer d) Orsat

Q.2 _____ Kilns are used in cement manufacturing.

a) Rotary b) Tunnel

c) Updraft d) Down draft

Q.3 An orsat apparatus is used for ____.

a) Calorific Value b) Combustion gases

c) Fuel viscosity d) Pressure

Q.4 Which of this is non combustible?

a) Peat b) Coke

c) Coal d) Stone

Q.5 Thermocouple is used to measure the

a) Pressure b) Temperature

c) Density d) Calorific value

Q.6 Which of the following is continuous furnace?

a) Down draft b) Up draft

c) Shuttle kiln d) Tunnel kiln

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Draft is used to maintain the temperature in furnace. (True/False)

Q.8 Pulverized coal burns more efficiently. (True/False)

Q.9 Lignite is an early form of coal. (True/False)

Q.10 Rotary kilns are a batch-type kiln. (True/False)

Q.11 Thermocouples is used to measure temperature. (True/False)

Q.12 Reheating furnaces are regenerative. (True/False)

SECTION-C

Note: Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)

Q.13 Differentiate between solid and gaseous fuels.

Q.14 Name type of kilns.

Q.15 Explain the role of chimney.

Q.16 Differentiate between batch and continuous kilns.

Q.17 List solid, liquid and gaseous fuels.

Q.18 Define calorific value.

Q.19 Explain the function of dampers in kilns.

Q.20 Explain the terms octane and cetane numbers.

Q.21 Explain the working of regenerator.

Q.22 Describe the ultimate analysis of coal.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. (2x8=16)

Q.23 Describe proximate analysis.

Q.24 Discuss calorific value determination in a bomb calorimeter.

Q.25 Explain the properties of solid, liquid and gaseous fuel.