

## **SECTION-D**

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

- Q.23 Describe the properties types and uses of various petroleum products.
- Q.24 Describe the classification of kiln and discuss about the tunnel kiln.
- Q.25 Explain the manufacturing process of water gas and list its properties and uses.

No. of Printed Pages : 4

Roll No. ....

220432

## **3rd Sem / Ceramic Engineering**

### **Subject : Fuels and furnaces**

Time : 3 Hrs.

M.M. : 60

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Example of solid fuel is \_\_\_\_\_.
- a) Petrol
  - b) Gas
  - c) Diesel
  - d) Coal
- Q.2 Which of the following is smoke free fuel?
- a) Ipg
  - b) Wood
  - c) Coke
  - d) Coal
- Q.3 In which of the following condition combustion takes place?
- a) The presence of a number combustible substance.
  - b) The presence of air with sufficient amount of oxygen
  - c) The temperature of combustible substance should be more than its ignition temperature.
  - d) The above conditons necessary

(20)

(4)

220432

(1)

220432

Q.4 Which of the following is a type of batch kiln?

- a) Tunnel
- b) Roller
- c) Shuttle
- d) None

Q.5 Which of the following devices is used to measure relatively high temperature in furnace

- a) Bolometer
- b) Pyrometer
- c) Ammeter
- d) Fluxometer

Q.6 Pot furnace which is either regenerative or recuperative, is used in the manufacture of

- a) Glass
- b) Stainless steel
- c) Potteries
- d) Refractory bricks

### **SECTION-B**

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

Q.7 Combustion is an exothermic chemical reaction. (True/False)

Q.8 Air contains \_\_\_\_\_ % of nitrogen by volume.

Q.9 CO stands for \_\_\_\_\_.

Q.10 Shuttle kiln is a batch type of kiln. (True/False)

Q.11 Calorific value is determined with the help of \_\_\_\_\_ apparatus.

Q.12 Tank furnace is used to make \_\_\_\_\_.

### **SECTION-C**

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

Q.13 Explain combustion.

Q.14 Explain liquid fuels with examples.

Q.15 Discuss pulverised coal.

Q.16 Differentiate between continuous and batch type kiln.

Q.17 Discuss orsat analysis.

Q.18 Explain burner for gaseous fuels.

Q.19 Explain flue gas.

Q.20 Discuss muffle furnace.

Q.21 List the pyrometers.

Q.22 Explain hoffman' kiln.