Q.22 Define paint and write any four advantages of this organic coating. (CO6)

SECTION-D

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

Q.23 a) Balance the following chemical equations

1) $N_2 + H_2 = NH_3$ 2) $C + O_2 = CO$

b) Write down atomic no., symbol and molecular mass of the following

1. Oxygen 2. Sodium

3. Aluminium 4. Carbon (CO1)

Q.24 Explain combustible and non- combustible constituents of coal (CO2)

Q.25 Differentiate between lyophilic and lyophobic colloids. (CO5)

Roll No. .....

Sem. 2nd/ Ceramic
Sub. : Chemistry Applications

Time : 3 Hrs. M.M. : 60

SECTION-A

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

Q.1 Atomic no. of element Boron is_____ (CO1)

a) 5 b) 8

c) 9 d) 10

Q.2 Composition $CO + N_2$ stands for which gas (CO2)

a) Water gas b) Producer gas

c) methane gas d) None of these

Q.3 Type of curve which shows conversion of liquid to vapour state in phase diagram is_____. (CO3)

a) Fusion curve b) Vaporization curve

c) Sublimation curve d) All of these

Q.4 Molecular formula for carbon dioxide is _____ (CO1)

a) H_2 b) H_2+O_2

c) CO_2 d) None of these

Q.5 Brownian motion is _____ type of motion (CO5)

a) Zig-gag b) Linear

c) Circular d) None of these

Q.6 Coal is _____ type of fuel (CO2)

a) Liquid b) Solid

c) Gas d) None of these

SECTION-B

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

Q.7 Define symbol. (CO1)

Q.8 Give two examples of liquid fuel. (CO2)

Q.9 Define Phase. (CO3)

Q.10 With increase in pressure adsorption _____ (increases / decreases) (CO4)

Q.11 Define Refractories. (CO6)

Q.12 Define Brownian motion. (CO5)

SECTION-C

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

Q.13 Write down the symbol of following elements_____. (CO1)

a) Helium b) Florine

c) Magnesium d) Silicon

Q.14 Define following (CO1)

a) Exothermic reactions

b) Endothermic reactions

Q.15 Explain proximate analysis of coal. (CO2)

Q.16 What is Bio gas? Write its three uses. (CO2)

Q.17 Explain the concept of vaporization and sublimation curve. (CO3)

Q.18 Define Triple point. (CO3)

Q.19 Differentiate between adsorption and absorption. (CO4)

Q.20 Define flocculation and coagulation. (CO5)

Q.21 What are refractories. Explain its types with example. (CO6)