Q.22 Define paint and Write any four advantages of this organic coating. (CO5)

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. (CO1)

1) $N_2+H_2=NH_3$

2) $H_2+O_2=H_2O$

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

1) oxygen

2) Sodium

3) Silicon

4) C

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

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

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2nd Year / Ceramic

Subject : 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 F is..... (CO1)

a) 7 b) 8

c) 9 d) 10

Q.2 Composition of water gas is ..... (CO2)

a) $CO+CH_4$ b) $CO+N_2$

c) $CO+H_2$ d) CH_4+H_2

Q.3 Type of curve in phase diagram are..... (CO3)

a) Fusion curve b) Vaporization curve

c) Sublimation curve d) All of these

Q.4 Molecular formula for water is..... (CO1)

a) H_2 b) H_2+O_2

c) H_2O d) None of these

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

a) zig-zag b) linear

c) circular d) none of these

Q.6 Coal is.....type of fuel (CO4)

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 atom. (CO1)

Q.8 Give two examples of fuel (CO2)

Q.9 Write one use of fuel (CO2)

Q.10 Strong chemical bond forms in _____ (physiosorption / chemisorption) (CO4)

Q.11 Define Ceramics (CO6)

Q.12 Define Coagulation. (CO5)

SECTION-C

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

Q.13 Write down the formula of following compounds (CO1)

a) Calcium chloride

b) Ozone

Q.14 Define following (CO1)

a) Exothermic reactions

b) Endothermic reactions

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

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

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

Q.18 Explain the concept of triple point. (CO3)

Q.19 Differentiate between physiosorption and chemisorption (CO4)

Q.20 Explain the terms tyndall effect and Brownian motion. (CO4)

Q.21 What are refractories. Explain its types with example. (CO5)