Roll No_____ **ID: 0524**

Branch: Chemical Engineering
Semester: 2nd
Subject Name: Industrial Chemistry

Time Allowed: 3Hrs **M.M.: 100**

Section-A

Note: Multi-type choice questions. All questions are compulsory. **10X1=10**

Q.1 The equivalent weight of an acid is
a) Molecular weight * acidity b) Molecular weight * basicity
c) Molecular weight/ acidity d) Molecular weight/ basicity

Q.2 _____ is used to prepare a solution of accurately known volume.
a) Measuring cylinder b) Beaker
c) Conical flask d) Volumetric flask

Q.3 An example of primary fuel is
a) Petrol b) Wood
c) Coke d) Natural Gas

Q.4 LPG stands for
a) Liquid petrol gas b) Liquid peat gas
c) Liquefied petroleum gas d) None of the above

Q.5 Nylon is an example of
a) Addition Polymerization b) Condensation Polymerization
c) Thermoplastic Polymerization d) None of the above

Q.6 Commonly used vulcanizing agent is
a) Graphite b) Carbon Black
c) Sulfur d) Dry Ice

Q.7 A chemical compound that provides cure from diseases is called
a) Poison b) Medicine
c) Enzyme d) Hormone

Q.8 The earthy impurities present in the ore are known as
a) Flux b) Gangue
c) Mineral d) Slag

Q.9 What is the other name of acyclic compounds?
a) Aliphatic compounds b) Aromatic compounds
c) Heterocyclic compounds d) None of the above

Q.10 The successive members of a homologous series differ by
a) CH_3 b) CH_3CH_2
c) CH_2CH_3 d) CH_2

Section-B

Note: Objective type questions. All questions are compulsory. **10X1=10**

Q.11 What is the color of a solution when phenolphthalein is added to NaOH solution?
Q.12 Give an example of primary standard solution.
Q.13 State two examples of solid fuel.
Q.14 What is the SI unit of calorific value?
Q.15 Full form of PVC is _____.
Q.16 Define polymers.
Q.17 Define drugs.
Q.18 Define ore.
Q.19 What is the functional group of alcohol?
Q.20 Define heterocyclic compounds.

Section-C

Note: Short Answer type questions. Attempt any twelve questions out of fifteen questions. **12X5=60**

Q.21 What is the basic principle of volumetric analysis?
Q.22 Define the terms – indicator, end point.
Q.23 What are the advantages of gaseous fuels over solid and liquid fuels?

Q.24 What are the characteristics of a good fuel?
Q.25 Give the classification of fuels.
Q.26 Write the preparation of polythene.
Q.27 What are the uses of PVC?
Q.28 Define antibiotic, broad spectrum antibiotics.
Q.29 Give the steps for the preparation of aspirin.
Q.30 Write a short note on calcinations.
Q.31 What are the uses of aluminum?
Q.32 Define aliphatic compounds, aromatic compounds.
Q.33 What are the uses of paracetamol?
Q.34 Define homologous series. What are its characteristics?
Q.35 What are the uses of acetone?

Section-D

Note: Long Answer type questions. Attempt any two questions out of three questions. 10X2=20

Q.36 a) State difference between addition and condensation polymerization
b) Describe the refining of Cu.

Q.37 Briefly describe the method for the determination of calorific value of fuel by Bomb calorimeter.

Q.38 Write the IUPAC names for the following compounds.
i) C_2H_4
ii) CH_4
iii) CH_3OH
iv) $C_2H_5NH_2$
v) HCHO