



Chemistry	(B)	L.K.No. 1072	Paper Code No. 8484
Paper II	(Objective Type)	Ist - A - Exam - 2023	(Group 2 nd)
Time :	20 Minutes	Inter (Part II)	
Marks :	17	Session (2019 - 21) to (2021 - 23)	

Note : Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

Bwp-12-2-23

Q.No.1	Ethanol can be converted into Ethanoic Acid by :
(1)	(A) Hydrogenation (B) Hydration (C) Oxidation (D) Fermentation
(2)	Which One is most Toxic : (A) CO ₂ (B) CO (C) O ₂ (D) CH ₄
(3)	Which Woody Raw Material is used for the manufacture of Paper Pulp : (A) Eucalyptus (B) Bagasse (C) Wheat Straw (D) Bamboo
(4)	Which of these Polymers is a Condensation Polymer : (A) nylon - 6, 6 (B) Polystyrene (C) Polyethene (D) Polyvinylchloride
(5)	Acetic Acid contains : (A) A Hydroxyl Group (B) A Carboxyl Group (C) A Hydroxyl and Carboxyl Group (D) A Carboxyl and an Aldehydic Group
(6)	The Carbon Atom of a Formaldehyde is : (A) sp - Hybridized (B) sp ² - Hybridized (C) sp ³ - Hybridized (D) dsp ² - Hybridized
(7)	Which Enzyme is not involved in fermentation of Starch : (A) Diastase (B) Zymase (C) Urease (D) Maltose
(8)	Grignard Reagent is reactive due to : (A) The presence of Halogen Atom (B) The presence of Mg atom (C) The polarity of C - Mg bond (D) None of these
(9)	The conversion of n - hexane into Benzene by heating in the presence of Pt is called : (A) Isomerization (B) Aromatization (C) Dealkylation (D) Rearrangement
(10)	Preparation of Vegetable Ghee involves : (A) Halogenation (B) Hydrogenation (C) Hydroxylation (D) Dehydrogenation
(11)	The Linear Shape is associated with which set of Hybrid Orbitals : (A) sp (B) sp ² (C) sp ³ (D) dsp ²
(12)	f - block elements are also called : (A) Non Typical Transition Elements (B) Outer Transition Elements (C) Normal Transition Elements (D) Inner Transition Elements
(13)	Hydrogen Bond is the strongest between the Molecules of : (A) HF (B) HCl (C) HBr (D) HI
(14)	Oxidation of NO in air produces : (A) N ₂ O (B) N ₂ O ₃ (C) N ₂ O ₄ (D) N ₂ O ₅
(15)	Which of the following elements is not present abundantly in Earth's Crust : (A) Silicon (B) Aluminium (C) Sodium (D) Oxygen
(16)	The number of Elements classified by Newlands in the Periodic Table are : (A) 38 (B) 62 (C) 92 (D) 85
(17)	Oxides of Beryllium are : (A) Acidic (B) Basic (C) Amphoteric (D) Neutral



Roll No.	1072 - 16000	Inter (Part II)	Session (2019 - 21) to (2021 - 23)
Chemistry (Subjective)	1st - A - Exam 2023	Group 2nd	Time 2 : 40 Hours Marks : 68

Note: It is compulsory to attempt any (8 - 8) Parts each from Q.No. 2 , Q.No.3 and attempt any (6) Parts from Q.No.4. Attempt any (3) Questions from Part - II .Write same Question No. and Its Part No. as given in the Question Paper.

Make Diagram where necessary.

Part - I

BWP-12-2-23

22 x 2 = 44

Q.No.2	(i)	How will you convert Boric Acid into Borax and Vice Versa ?
	(ii)	Why is CO_2 a gas at room temperature while SiO_2 is a Solid ?
	(iii)	What are Semiconductors ? Give two examples.
	(iv)	Write two Electrophillic Substitution Reactions of Benzene.
	(v)	Prepare Benzene from Acetylene.
	(vi)	Draw the resonance structures of Benzene.
	(vii)	Differentiate between Thermoplastic and Thermosetting Polymers.
	(viii)	Write structures of Monomers of Epoxy Resins.
	(ix)	How are Proteins classified based on their functions ?
	(x)	Describe Hazards of Ozone as a Pollutant.
	(xi)	What do you mean by Biochemical Oxygen Demand (BOD) ?
	(xii)	Write the two harmful effects of Chlorination of Water.
Q.No.3	(i)	Write down names and formulas of any two Ores of Sulphur.
	(ii)	How is H_2SO_4 used to Dehydrate the Oxalic Acid and Glucose ?
	(iii)	How does Aqua Regia dissolve gold in it ?
	(iv)	What is Reforming ? Give its chemical equation.
	(v)	What are Alicyclic Compounds ? Draw structure of two compounds.
	(vi)	What is Markownikov's Rule ? Give one example.
	(vii)	Why are Alkenes more reactive than Alkanes ?
	(viii)	How will you prepare Chloroprene from Ethyne ?
	(ix)	Give two methods for preparation of Alkylhalides from Alcohol .
	(x)	What are $\text{S}_{\text{N}}2$ Reactions ? Give one example.
	(xi)	How is Diammonium Phosphate prepared ?
	(xii)	Write down names of any four Non - Woody Raw Materials for Paper.
Q.No.4	(i)	Under what conditions does Aluminium Corrode ?
	(ii)	What is meant by Chelates ?
	(iii)	Why are Transition Metals tough ?
	(iv)	How can we distinguish Ethanol and Methanol ?
	(v)	What is meant by Denaturing of Alcohol ?
	(vi)	How is Phenyl Acetate produced from Phenol ?
	(vii)	Write down any four uses of Acetaldehyde .
	(viii)	How can you distinguish Carbonyl Compounds from Non - Carbonyl Compounds ?
	(ix)	What is Zwitter Ion ?

Part - II

3 x 8 = 24

Q.No.5	(a)	What are the Halides ? Write its types. Describe one of them in detail.	(4)
	(b)	What will happen when : (i) Lime is heated with coke (ii) Calcium Nitrate is heated (iii) Gypsum is heated (iv) Beryllium Oxide is treated with NaOH	(4)
Q.No.6	(a)	Explain Peculiar Behaviour of Fluorine.	(4)
	(b)	What is Role of Digestion Step in the manufacture of Paper Pulp ?	(4)
Q.No.7	(a)	Define sp^3 Hybridization. Explain formation of Ethane Molecule according to this approach.	(4)
	(b)	Describe the structure of Benzene on the basis of Atomic Orbital Treatment.	(4)
Q.No.8	(a)	Write down the mechanism of Kolbe's Electrolytic Method for the preparation of Ethane.	(4)
	(b)	Discuss $\text{S}_{\text{N}}1$ reactions in detail.	(4)
Q.No.9	(a)	What is Haloform Reaction ? How will you prepare Iodoform from : (a) Acetaldehyde (b) Acetone (c) Ethanol	(4)
	(b)	Write Mechanism for the formation of Ethyl Acetate from Ethyl Alcohol and	(4)