



Chemistry	(A)	L.K.No. 1466	Paper Code No. 8482
Paper II	(Objective Type)	Inter (1st - A - Exam 2024)	
Time :	20 Minutes	Inter (Part - II)	(Group 2nd)
Marks :	17	Session (2020 - 22) to (2022 - 24)	

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

BWP-2-24

Q.No.1	Chile Saltpetre has the Chemical Formula :
(1)	(A) NaNO_3 (B) KNO_3 (C) $\text{Na}_2\text{B}_4\text{O}_7$ (D) $\text{Na}_2\text{CO}_3 \cdot \text{H}_2\text{O}$
(2)	Which element forms an ion with charge +3 : (A) Beryllium (B) Aluminium (C) Carbon (D) Silicon
(3)	Anhydride of HClO_4 is : (A) ClO_3 (B) ClO_2 (C) Cl_2O_5 (D) Cl_2O_7
(4)	Which of the following is a Typical Transition Metal : (A) Sc (B) Y (C) Ra (D) Co
(5)	A Double Bond consists of : (A) Two Sigma Bonds (B) One Sigma and One Pi Bond (C) One Sigma and Two Pi Bonds (D) Two Pi Bonds
(6)	Which one of the following Gases is used for Artificial Ripening of Fruits : (A) Ethene (B) Ethyne (C) Methane (D) Propane
(7)	The Conversion of n - Hexane into Benzene by heating in the Presence of Pt is called : (A) Isomerization (B) Rearrangement (C) De Alkylation (D) Aromatization
(8)	Elements of the Periodic Table are classified into blocks : (A) Four (B) Three (C) Five (D) Six
(9)	Sulphuric Acid acts as a Dehydrating agent in reaction with : (A) Formic Acid (B) Zinc (C) Copper (D) Sodium Hydroxide
(10)	The removal of two atoms or groups from adjacent Carbon atoms in the presence of a base is called : (A) Substitution Reaction (B) Elimination Reaction (C) Hydrolytic Reaction (D) Decomposition Reaction
(11)	Unpolluted Rain Water has a pH of : (A) 4.9 (B) 5.6 (C) 5.3 (D) 7.0
(12)	Newspaper can be recycled again and again by how many times : (A) 2 (B) 3 (C) 4 (D) 5
(13)	The Enzyme not involved in Fermentation of Starch : (A) Diastase (B) Zymase (C) Urease (D) Invertase
(14)	Cannizzaro's reaction is not given by : (A) Formaldehyde (B) Acetaldehyde (C) Benzaldehyde (D) Triethyl Acetaldehyde
(15)	Which reagent is used to reduce a Carboxylic group to an Alcohol : (A) H_2 / Ni (B) H_2 / Pt (C) NaBH_4 (D) LiAlH_4
(16)	Which one of the following Enzymes brings about the Hydrolysis of Fats : (A) Urease (B) Maltase (C) Zymase (D) Lipase
(17)	Phosphorus helps the growth of : (A) Roots (B) Leave (C) Stem (D) Seed



Roll No.	1466 - 15000	Inter (Part - II)	Session (2020 - 22) to (2022 - 24)
Chemistry (Subjective)	Inter (1st - A - Exam - 2024)	(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.

BWP-2-24

Make Diagram where necessary.

Part - I

22 x 2 = 44

Q.No.2	(i)	The Oxidation State vary in a period but remain almost constant in a group. Write reason briefly.	
	(ii)	Define Shielding Effect.	
	(iii)	Why is 2% Gypsum added in the Cement?	(iv) BeO is Amphoteric . Prove it.
	(v)	Why Fe^{+3} shows maximum Paramagnetic behaviour among first Transition Series?	(vi) What is Chromyl Chloride test? Give equation also.
	(vii)	What is Wurtz Synthesis ? Give equation also.	(viii) How Propanoic Acid is prepared from Ethyl Magnesium Bromide ? Give equation.
	(ix)	Define Iodine Number.	(x) Differentiate between Ligases and Lyases.
	(xi)	Write down any two importance of Proteins.	(xii) Why Phosphatic Fertilizers are provided to plants?
Q.No.3	(i)	Complete and balance the following Chemical equations : (a) $\text{P} + \text{NO} \rightarrow ?$ (b) $\text{NO} + \text{Cl}_2 \rightarrow ?$	
	(iii)	Arrange the following ions in order of increasing size : F^- , Cl^- , I^- , Br^- .	(iv) What is " Iodized Salt " ?
	(v)	What is the Composition of Natural Gas? Give its use.	(vi) Why there is no free Rotation around a Carbon - Carbon double bond?
	(vii)	Why Ethene is more reactive than Ethane?	(viii) How to Prepare good quality Polythene?
	(ix)	Convert : Propyne \rightarrow Acetone .	(x) What is Oxidizing Smog?
	(xi)	How to measure the quality of Water naturally?	(xii) What are the Harmful effects of Chlorination of water?
Q.No.4	(i)	How does Borax serve as a Water Softening Agent?	
	(ii)	Give names alongwith the formulas of three important ores of Aluminium.	
	(iii)	Describe Four important uses of Silicates.	
	(iv)	What is the difference between Ortho - Para and Meta Directing Groups in the Mono- Substituted Benzene Ring?	
	(v)	What is the difference between Rectified Spirit and Absolute Alcohol?	
	(vi)	Write IUPAC names of the following Compounds : (a) $(\text{CH}_3)_3\text{COH}$ (b) $(\text{CH}_3)_2\text{CHCH}_2\text{OH}$	
	(vii)	Give General Mechanism of the Acid Catalyzed Nucleophilic Addition Reaction of Aldehydes and Ketones.	
	(viii)	What are Peptides ? How are Dipeptides formed?	
	(ix)	What happens when Calcium Acetate is Heated?	

(Part - II)

3 x 8 = 24

Q.No.5	(a)	Mention four points of similarity of Hydrogen each with Alkali Metals and Halogens.		2+2=4
	(b)	Describe with labelled diagram the manufacture of Sodium Hydroxide by Diaphragm Cell.		(4)
Q.No.6	(a)	What is Bleaching Powder? How can it be prepared by Beckmann's method?		(4)
	(b)	How Urea is manufactured? Give the reactions involved.		(4)
Q.No.7	(a)	What is Cracking of Petroleum and discuss its different types?		(4)
	(b)	Explain $\text{S}_{\text{N}}1$ Reaction with Complete Mechanism.		(4)
Q.No.8	(a)	Explain the Markownikov's Rule with reaction mechanism.		(1 + 3) = (4)
	(b)	What is Aldol Condensation ? Why Acetaldehyde give this reaction ? Justify your answer with mechanism.		(1 + 3) = (4)
Q.No.9	(a)	Write down the mechanism of : (i) Friedel Craft Alkylation (ii) Friedel Craft Acylation		(4)
	(b)	How Lucas Test is used to identify Primary , Secondary and Tertiary Alcohol?		(4)



03-04-2024