



Chemistry	(B)	L.K.No.1309	Paper Code No. 8483
Paper II	(Objective Type)	Inter - A - 2022	(Group Ist)
Time :	20 Minutes	Inter (Part II)	
Marks :	17	Session (2018 - 20) to (2020 - 22)	

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.

B20P-C, 1-22

Q.No.1	The pH range of the Acid Rain is :
(1)	(A) 7 - 6.5 (B) 6.5 - 6 (C) 6 - 5.6 (D) less than 5
(2)	Peroxyacetylnitrate is an irritant to human beings and it affects : (A) Eyes (B) Ears (C) Stomach (D) Nose
(3)	Which three elements are needed for the healthy growth of plants (A) N, S, P (B) N, Ca, P (C) N, P, K (D) N, K, C
(4)	Which of these Polymers is an Addition Polymer : (A) nylon - 6, 6 (B) Polystyrene (C) Terylene (D) Epoxy Resin
(5)	Acetic Acid is manufactured by : (A) Distillation (B) Fermentation (C) Ozonolysis (D) Esterification
(6)	Which of the following will have the highest boiling point : (A) Methanal (B) Ethanal (C) Propanal (D) 2 - Hexanone
(7)	Which compound shows Hydrogen Bonding : (A) C ₆ H ₆ (B) C ₂ H ₅ Cl (C) CH ₃ - O - CH ₃ (D) C ₂ H ₅ - OH
(8)	In Primary Alkyl Halides, the Halogen Atom is attached to a Carbon which is further attached to how many Carbon Atoms : (A) 2 (B) 3 (C) 1 (D) 4
(9)	Benzene Molecule contains : (A) Three Double Bonds (B) Two Double Bonds (C) One Double Bond (D) Delocalized π - electron charge
(10)	Preparation of Vegetable Ghee Involves : (A) Halogenation (B) Hydrogenation (C) Hydroxylation (D) Dehydrogenation
(11)	The state of Hybridization of Carbon Atom in Methane is : (A) sp ³ (B) sp (C) sp ² (D) dsp ²
(12)	Which of the following is a non - typical transition element : (A) Cr (B) Mn (C) Zn (D) Fe
(13)	Which of the following Hydrogen Halide is the weakest acid in solution : (A) HF (B) HBr (C) HI (D) HCl
(14)	Out of all the elements of Group VA, the highest Ionization energy is possessed by : (A) N (B) P (C) Sb (D) Bi
(15)	Tinical is a mineral of : (A) Al (B) B (C) Si (D) C
(16)	Which one of the following is not an Alkali Metal (A) Francium (B) Caesium (C) Rubidium (D) Radium
(17)	Mark the correct statement : (A) The Ionization Energy of Calcium is lower than that of Barium. (B) The Ionization Energy of Calcium is lower than that of Magnesium. (C) The Ionization Energy of Calcium is higher than that of Beryllium. (D) The Ionization Energy of Calcium is lower than that of Strontium.



Roll No.	1309-15000	Inter (Part II)	Session (2018-20) to (2020-22)
Chemistry (Subjective)	Inter - A - 2022	Time 2:40 Hours	Marks : 68 (Group Ist)

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.

Biop-G1-22

Make Diagram where necessary.

Part - I

22 x 2 = 44

Q.No.2	(i)	Give two defects of Mendeleev's Periodic Table.
	(ii)	Why Negative Ion is larger than Parent Atom?
	(iii)	Give the Chemistry of Borax Bead Test.
	(iv)	Why 2% Gypsum is added in the Cement?
	(v)	Give four uses of Borax.
	(vi)	What is Chemical Garden?
	(vii)	Give the name and formula of two Oxides of Nitrogen.
	(viii)	Give reaction of Zn with dil and conc. HNO₃
	(ix)	What are Typical and Non-Typical Transition Elements?
	(x)	Why Transition Metal show variable Oxidation State?
	(xi)	What are the essential qualities of Good Fertilizer?
	(xii)	Enlist non-woody raw material for the manufacturing of paper.
Q.No.3	(i)	How XeF₆ reacts with : (a) H₂O (b) SiO₂
	(ii)	What are Freons and Teflon?
	(iii)	Explain how Octane number of Gasoline is improved by reforming?
	(iv)	What is Knocking? How can we reduce it?
	(v)	How will you synthesize the following compounds starting from Ethyne : (a) Acetaldehyde (b) Methyl Nitrile
	(vi)	Convert Ethane to Ethyne.
	(vii)	Write a note on the Acidity of Ethyne.
	(viii)	How is Acetylene prepared on industrial Scale?
	(ix)	How will you convert CH₃COOH \rightarrow CH₃CH₂COOH
	(x)	Define Iodine Number.
	(xi)	What are Steroids? Draw the general structural formula of a Steroid.
	(xii)	Write down the structure of Cholesterol.
Q.No.4	(i)	Describe the Catalytic Oxidation of Benzene.
	(ii)	What information do we get from x-ray analysis of Benzene?
	(iii)	Write down four uses of Ethanol.
	(iv)	How Ethers are prepared by Williamson's Synthesis?
	(v)	Describe the reactivity of Carbonyl Functional Group.
	(vi)	How Alkanenitriles are prepared? Convert them to Carboxylic Acid.
	(vii)	What are essential and non-essential Amino Acids?
	(viii)	Name four components of Environment.
	(ix)	How Chlorofluorocarbons destroy the Ozone Layer?

Part - II

3 x 8 = 24

Q.No.5	(a)	Explain similarities of Hydrogen with Halogens and dissimilarities with Alkali Metals.	(4)
	(b)	Write a note on Aluminium Silicate.	(4)
Q.No.6	(a)	What will happens when : (i) Lithium Carbonate is heated (ii) Lithium Hydroxide is heated (iii) Lithium reacts with Nitrogen (iv) Lithium burns in air	(4)
	(b)	Give two methods for the preparation of : (i) Potassium Chromate (ii) Potassium Dichromate	(4)
Q.No.7	(a)	Define Functional Group. Write names of three functional groups that have Nitrogen Atom.	(4)
	(b)	How does Ethyl Magnesium Bromide react with followings : (i) CO₂ (ii) H₂O (iii) CH₃CHO (iv) Cyanogen Chloride	(4)
Q.No.8	(a)	Describe the Kolbe's Electrolytic Method for the preparation of Ethyne.	(4)
	(b)	What is Cannizzaro's Reaction? Give its mechanism.	(4)
Q.No.9	(a)	What are Symmetrical and Non-Symmetrical Ethers? Give any two preparation reactions of Ethers.	(4)
	(b)	Give the reaction Mechanism of Friedel - Craft : (i) Alkylation (ii) Acylation	(4)

