Chemistry | D | L.K.No. 916 | Paper Code No. 8488

Paper II (Objective Type) | (Inter - A - 2018) | New Pattern

Time : 20 Minutes | Inter(Part - II) | Group 2nd

Marks : 17 | Session (2015 - 2017) to (2016 - 2018)

Bwp-12-Ga2-18

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 number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

Q.No.1	Mark the Correct Statement :
(1)	(A) Na^+ is smaller than Na Atom (B) Na^+ is larger than Na Atom (C) Cl^{-1} is smaller than Cl Atom (D) Cl^{-1} (ion) and Cl (atom) are equal in size.
(2)	Which Catalyst is used in Contact Process : (A) Fe_2O_3 (B) V_2O_5 (C) SO_3 (D) Ag_2O
(3)	Aluminium Oxide is : (A) Acidic (B) Basic (C) Neutral (D) Amphoteric
(4)	Which of the following Sulphate is not Soluble in water : (A) Sodium Sulphate (B) Potassium Sulphate (C) Zinc Sulphate (D) Barium Sulphate
(5)	The Anhydride of $HClO_4$ is : (A) ClO_3 (B) ClO_2 (C) Cl_2O_5 (D) Cl_2O_7
(6)	Vinyl Acetylene Combines with HCl to form : (A) Polyacetylene (B) Benzene (C) Chloroprene (D) Divinyl Acetylene
(7)	Which set of Hybrid Orbital has Triangular Shape : (A) Sp^3 (B) Sp^2 (C) Sp (D) dSp^2
(8)	The Strength of the Binding Energy of Transition Elements depends upon : (A) Number of Electron Pairs (B) Number of Unpaired Electrons (C) Number of Neutrons (D) Number of Protons
(9)	The Electrophile in Aromatic Sulphonation is : (A) H_2SO_4 (B) HSO_4 (C) SO_3 (D) SO_3^+
(10)	The Carbon Atom of Carbonyl Group is : (A) Sp Hybridized (B) Sp^2 Hybridized (C) Sp^3 Hybridized (D) dSp^2 Hybridized
(11)	Which compound is called a Universal Solvent : (A) H_2O (B) CH_3-O-CH_3 (C) C_2H_5OH (D) CH_3OH
(12)	Elimination Bimolecular Reactions involve : (A) Zero Order Kinetics (B) First Order Kinetics (C) Third Order Kinetics (D) Second Order Kinetics
(13)	Which is a Neutral Amino Acid : (A) Lysine (B) Histidine (C) Glycine (D) Glutamic Acid
(14)	Ecosystem is a smaller unit of : (A) Biosphere (B) Lithosphere (C) Hydrosphere (D) Atmosphere
(15)	Phosphorus helps the growth of : (A) Root (B) Leave (C) Stem (D) Seed
(16)	Which of these Polymers is a Synthetic Polymer : (A) Animal Fat (B) Starch (C) Cellulose (D) Polyester
(17)	In Purification of Potable Water the Coagulant used is : (A) Nickel Sulphate (B) Alum (C) Barium Sulphate (D) Copper Sulphate

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Roll No. (Group 2nd)	916 - 6000+800	Session (2015 - 2017) to (2016 - 2018)	Inter (Part - II)
Chemistry (Subjective)	Inter - A -2018	Time : 2:40 Hours Marks : 68	New Pattern

Note : It is compulsory to attempt any (8 - 8) parts each from Q.No.2 and Q.No.3 and attempt any (6) parts from Q. No.4 . Attempt any (03) 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-Gr2-18 | 22 x 2 = 44

Q.No.2 (i) Why the Second Value of Electron Affinity of an element is usually shown with a positive sign?

(ii) What are Amphoteric Oxides ? Give two examples.

(iii) Why 2 % Gypsum is added in grinding during the process of manufacturing of Cement?

(iv) What is the effect of Heat on Boric Acid?

(v) Write any two points of importance of Oxides of Lead in Paints.

(vi) Write down formulae of : (a) Litharge (b) Red Lead

(vii) Write two points of differences between Red and White Phosphorus.

(viii) Write two reactions to show that H_2SO_4 acts as Oxidizing Agent.

(ix) How does P_2O_3 react with Water in Cold State and Hot State?

(x) What is meant by Hydrosphere ? Give two examples of its sources.

(xi) Write down the conditions which are required for the formation of Smog.

(xii) Define Geometric Isomerism with a suitable example.

Q.No.3 (i) Why does damaged Tin Plated Iron get rusted quickly?

(ii) What is meant by Sacrificial Corrosion?

(iii) What is Baeyer's Test ? Explain it giving an example.

(iv) Why does Alkynes are Less Reactive than Alkenes towards Electrophilic Reagents?

(v) What is General Pattern of Reactivity of Benzene towards an Electrophile?

(vi) Prepare following compounds from Ethyl Magnesium Bromide :
(a) Propanoic Acid (b) 1 - Propanol

(vii) What are essential conditions for the fermentation process in order to prepare Ethanol ?

(viii) What is meant by Denaturing of Alcohol and Wood Spirit?

(ix) What is Silver Mirror Test? Give an example.

(x) Give Iodoform Test to distinguish Ethanol from Methanol.

(xi) What is Zwitter Ion? Why it is called an Internal Salt?

(xii) What is Peptide Bond? Give formula of a Dipeptide.

Q.No.4 (i) What is Nylon 6 , 6 ? How is it prepared?

(ii) Differentiate between Fats and Oils.

(iii) Define Iodine Number.

(iv) What are essential Nutrient Elements? Why are these needed for Plant Growth?

(v) Discuss reactions taking place for setting of Cement in 1 to 7 days.

(vi) Write down two essential qualities of a good fertilizer.

(vii) Give chemical reactions of Chlorine with Cold Dilute and Hot Concentrated Solution of NaOH.

(viii) What is Teflon ? Give its two uses.

(ix) What is Iodized Salt ?

Part - II

Q.No.5 (a) Discuss Mendeleev's Periodic Law and give its advantages. (4)

(b) Describe the manufacture of Sodium Hydroxide by Diaphragm Cell. Diagram is not required. (4)

Q.No.6 (a) What are the main causes of Corrosion? Write two methods to prevent Corrosion. (4)

(b) What is Smog? Write three conditions for the formation of Smog. (4)

Q.No.7 (a) Write a note on Reforming of Petroleum. (4)

(b) Explain the structure of Benzene on the basis of Atomic Orbital Treatment. (4)

Q.No.8 (a) Prepare Ethane and Ethene by Kolbe's Electrolytic Method with their mechanisms. (4)

(b) How will you prepare C_6H_5OH by : (4)
(a) Dow's Method (b) Sodium Salt of Benzene Sulphonic Acid

Q.No.9 (a) Write a detailed note on S_N2 reactions of Alkylhalides. (4)

(b) How does Acetaldehyde react with : (a) C_2H_5MgBr (b) HCN (c) $NaHSO_3$ (d) NH_2OH (4)