

1219 Warning:- Please write your Roll No. in the space provided and sign. Roll No. \_\_\_\_\_  
(Inter Part - II) (Session 2015-17 to 2017-19) Sig. of Student \_\_\_\_\_

Chemistry (Objective)

Group - II

Paper (II)

Time Allowed:- 20 minutes

PAPER CODE 4488

Maximum Marks:- 17

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think 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. Write PAPER CODE, which is printed on this question paper, on the both sides of the Answer Sheet and fill bubbles accordingly, otherwise the student will be responsible for the situation. Use of Ink Remover or white correcting fluid is not allowed.

Q.1

- 1) Which of these polymers is an addition polymer?  
(A) Nylon-6,6 (B) Polystyrene (C) Terylene (D) Epoxy resin
- 2) The reaction between fat and NaOH is called  
(A) Esterification (B) Hydrogenolysis (C) Fermentation (D) Saponification
- 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) Newspaper can be recycled again and again by how many times?  
(A) 5 (B) 4 (C) 3 (D) 2
- 5) Mark the correct statement.  
(A)  $Na^+$  is smaller than Na atom (B)  $Na^+$  is larger than Na atom (C)  $Cl^-$  (ion) is smaller than Cl atom (D)  $Cl^-$  (ion) and Cl atom are equal in size
- 6) Which ion will have the maximum value of heat of hydration?  
(A)  $Na^+$  (B)  $Ca^{2+}$  (C)  $Ba^{2+}$  (D)  $Mg^{2+}$
- 7) Tincal is a mineral of  
(A) Al (B) B (C) Si (D) C
- 8) Laughing gas is chemically  
(A) NO (B)  $N_2O$  (C)  $NO_2$  (D)  $N_2O_4$
- 9) Which is the strongest acid?  
(A)  $HClO$  (B)  $HClO_2$  (C)  $HClO_3$  (D)  $HClO_4$
- 10) The total number of transition elements is  
(A) 10 (B) 14 (C) 40 (D) 58
- 11) Ethers show the phenomenon of  
(A) Position isomerism (B) Cis-trans isomerism (C) Metamerism (D) Functional group isomerism
- 12) Formula of Chloroform is  
(A)  $CH_3Cl$  (B)  $CCl_4$  (C)  $CH_2Cl_2$  (D)  $CHCl_3$
- 13) Which compound is the most reactive one?  
(A) Benzene (B) Ethene (C) Ethane (D) Ethyne
- 14) Grignard's 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) The polarity of Mg-X bond
- 15) According to Lewis concept ethers behave as  
(A) Acid (B) Base (C) Acid as well as base (D) Neutral
- 16) Cannizzaro's reaction is not given by  
(A) Formaldehyde (B) Acetaldehyde (C) Benzaldehyde (D) Trimethyl-acetaldehyde
- 17) The solution of which acid is used for the seasoning of food?  
(A) Formic acid (B) Acetic acid (C) Benzoic acid (D) Butanoic acid

1281 -- 1219 -- 8500 (4)

SGID-P11-12-19

Warning:- Please, do not write anything on this question paper except your Roll No.  
1219 (Inter Part - II) (Session 2015-17 to 2017-19)

Chemistry (Subjective)  
Time Allowed: 2.40 hours

(Group II)

Paper (II)  
Maximum Marks: 68

Section ----- I

2. Answer briefly any Eight parts from the followings:-

8 × 2 = 16

- (i) Why alkali metals give ionic hydrides?
- (ii) Write down similarities of hydrogen with group IVA elements.
- (iii) Give justification for the use of potassium superoxide in breathing equipments of space crafts.
- (iv) Write down the chemical formulae of minerals (a) Kaolin (b) Cryolite
- (v) Write down the effect of heat on Boric acid.
- (vi) How kaolin differs from ordinary clay? (vii) Write two methods of preparation of  $\text{NO}_2$
- (viii) How nitrous acid reacts with  $\text{CO}(\text{NH}_2)_2$  and  $\text{C}_6\text{H}_5\text{NH}_2$ ?
- (ix) How Orthophosphoric Acid is prepared on large scale?
- (x) Mention industrial importance of proteins.
- (xi) Write down the names of two enzymes used in the diagnosis of diseases.
- (xii) How carbon monoxide acts as highly poisonous gas?

3. Answer briefly any Eight parts from the followings:-

8 × 2 = 16

- (i) What is vital force theory, why it was rejected.
- (ii) Write structural formulas for the following compounds (a) But-1-ene-3-yne (b) divinyl acetylene
- (iii) What is Raney Nickel. How it is prepared.
- (iv) Write down the formulas of the followings (a) Anthracene (b) Phenanthrene
- (v) How will you prepare 2,4,6-Trinitrotoluene from benzene in two steps.
- (vi) What are primary and tertiary alkyl halides. Give one example each.
- (vii) Write reaction of ethyl magnesium chloride with methanal.
- (viii) Write structural formulas of the following compounds (a) Carboic acid (b) Glycerol
- (ix) How ether is prepared by Williamson synthesis.
- (x) Write structural formulas of the following compounds. (a) Oxalic acid (b) Malonic acid
- (xi) Write any four uses of Acetic acid. (xii) What are amino acids, give their general formula.

4. Answer briefly any Six parts from the followings:-

6 × 2 = 12

- (i) Write any two applications of a noble gas Argon. (ii) Justify that HF is a weaker acid than HCl.
- (iii) What is Teflon. Give its any two uses. (iv) Why transition elements exhibits variable valency.
- (v) Complete the following reactions (a)  $\text{Formaldehyde} + \text{NaHSO}_3 \longrightarrow$  (b)  $\text{Acetone} + \text{NaHSO}_3 \longrightarrow$
- (vi) Write Industrial method for the preparation of formaldehyde.
- (vii) Write any two points of difference between DNA and RNA.
- (viii) What is Glycogen? (ix) Write down difference between polypeptide and protein.

Section ----- II

Note: Attempt any three questions.

(8 × 3 = 24)

5. (a) What are the improvements made in the Mendeleev's periodic table?  
(b) What is the function of calcium in plant growth?
6. (a) State the different rules for naming the co-ordination complexes according to IUPAC system?  
(b) What is acid rain? How does it affect our environment?
7. (a) Discuss cis-trans isomerism, giving two examples.  
(b) Describe the stability of benzene on the basis of heat of hydrogenation.
8. (a) Write down the reaction with mechanism for the preparation of alkene by Kolbe's Electrolytic method.  
(b) How methanol is prepared on industrial scale? Why is it called wood spirit?
9. (a) Describe  $\text{S}_{\text{N}}2$  mechanism in detail. (b) What is aldol condensation? Discuss its mechanism.

1282 -- 1219 -- 8500

SGD-12-G2-19