Important Intructions :-

1. All questions are compulsory. Internal choice is given in every question from Question No 5 to 19

2. Question No. 1 to 4 are objective type question total marks 28.

3. Question No. 5 to 12, each question carries 2 marks. (Word limit 50 words)

4. Question No. 13 to 16, each question carries 3 marks. (Word limit 75 words)

5. Question No. 17 carries 4 marks. (Word limit 120 words)

6. Question No. 18 to 19 each question carries. (Word limit 150 words)

1x7=7

Write the correct option

1. Which of the Crystalline Solid Sic silicon Carbide is -

    (i)   Covalent

    (ii)   Molecular

    (iii)   Metallic

    (iv)   Ionic

2. Factor on which velocity contant of Ist order reaction depends -

    (i)   Nature of reactant

    (ii)   Volume of reactant

    (iii)   Pressure applied on reactant

    (iv)   Concentration of reactant

3.   Hardy- Schulze Rule is related to -

(i)   Solution

(ii)   Coagulation

(iii)   Emulsification

(iv)   Demulsification

4.   At normal temperature ammonia is -

(i)   Gas

(ii)   Solid

(iii)   Liquid

(iv)   Plasma

5.   Full form of PMMA is -

(i)   Poly methyl methacrylate

(ii)   Poly methyl methyl amine

(iii)   Poly melaminal acrylate

(iv)   Poly monophaspho methyl acrylate

6.   Monomer of PVC is -

(i)   Vicinal Chloride

(ii)   Vinyl Choride

(iii)   Styrene

(iv)   Propylene.

7.   Varonal, Seconal are example of -

(i)   Antibiotic

(ii)   Tranquiliser

(iii)   Antiseptic

(iv)   Antipyretic

Fill in the blank: **1x7=7**

1.   Number of atoms in bodycentred cubic crystal is...............................

2.   For the concentration of .... ore froath floatation method is used.

3.   Bleaching by SO_2 is .... reaction.

4.   Name of compound formed by the reaction of formaldehyde and amonia......................................

5......................................is the reaction to form amine from amide.

6.   .... ATP molecule are obtained by complete oxidation of Glucose.

7.   Example of an antacid is --------------------------

3. Match the column   **1x7=7**

	I		II
(a)	CaF_2	(i)	Coagulation power
(b)	Gold Number	(ii)	$CuCO_3.Cu(OH)_2$
(c)	Malachite	(iii)	Pungent green yellow gas
(d)	Chlorine	(iv)	Cellulose
(e)	Protien	(v)	Ionic compound
(f)	Natural Polymer	(vi)	α -amino acid polymer
(e)	Asprin	(vii)	Sucrose
		(viii)	Absorption
		(ix)	Acetyl salicylic acid

Answer in one word/ one sentence   **1x7 = 7**

(i)   Write the example of polar molexular solid.

(ii)   Write formula of   Quantum efficiency.

(iii)   Which compound id used for the tonning in photography.

(iv)   Write general formula of p-block elements.

 (v)   Write IUPAC name of $K_4[Fe(CN)_6]$

(vi)   Write the stucture farmula of carbolic acid.

(vii)   Name the main product of mustard oil reaction.

5.   Write any two examples of non ideal solution with positive
        deviation.   2

                              OR

        Write any two examples of non iedal solution with negative
        deviation.

6. Write any two difference between lyophilic and lyophobic colloid. 2

<center>OR</center>

Write any two differences between physical adsorption and chemical adsorption.

7. Bleaching of flower by chlorine is pemanent where as bleaching of flower by SO_2 is temprary Why? write reason. 2

<center>OR</center>

H_2O is liquid at normal temprature where as H_2S gas why? Write reason.

8. What is aquaregia? Write its one use. 2

<center>OR</center>

F_2O is not considered as oxide of fluorine, why ?

9. Write the full name and structural formula of EDTA 2

<center>OR</center>

Write the full name and structural formula of EAN.

10. NH_3, $R-NH_2$, R_2-NH, R_3-N

Decide the sequence of basicity of following-

NH_3, $R-NH_2$, R_2-NH, R_3-N

OR

Write any two isomer compound and formula of C_3H_9N.

11. Write the structure of Zwitter Ion. 2

OR

Write the denaturation of protein.

12 Write one example of each Antibiotic and Antiseptic. 2

OR

Write one example of each analgesic and sulpha drug.

13 Define elevation in boiling point. Elevation in boiling point 0.63 K is observed on dissolvig 12.5 g urea in 170 g water. Calculate the molecularmass of urea. (Kb for water=0.52 KKg mol^{-1})

OR

Define depression in freezing point. 1.00g non-electrolyte is dissolved in 50g of benzene decreases freezing point by 0.40 K calculate the molecular mass of solute. (Kf for bezene =5.12 Kg mol^{-1})

14. Write any three differences between order of reacton and Molecularity. 3

OR

Write any three diffenences between Rate of reaction and Rate constant

15. Write the Victor Mayer method to distinguish between Primary. Secondaryand Tertiary alcohol. 3

OR

How will you obtain from phenol.

(a)   Picric acid

(b)   Aniline

(c)   P-benzoquinone

16. Write only chemical equation for following changes

(a)   Silver Mirror Test

(b)   Aldol Condensation

OR

Write following equation. with detail.

a.   Esterification

b.   Decarboxylation

17. Write Chemical formula of followingh compound-
4

(i)   2-Chlorobutane

(ii)   2- Bromo-3methyl pentane

(iii) 1-4 Dibromo bute-2 ene

(iv)   1,1,1 Trichloro methane.

<p align="center">OR</p>

Write with Chemical reaction

(i)   Wurtz Reaction

(ii)   Hunsdicker Reaction

18. Write definition, formula and unit of Specific conductance. Molecular conductivity and Equvalent conductivity.   5

OR

Write Kohlrausch's law and its two applications.

19. Write defination, general formula and any four uses of Transitionelement.
                    5

OR

Write defination, general formula and any four uses of Inner Transition element