www.Padasalai.Net www.CBSEtips.in

JAZZ PUBLIC MATRIC. HR. SEC. SCHOOL MELUR

Type : [B] ANSWER KEY - MAY - 2022

Q.no	option	Answer
1	c	Glycine
2	a	Methanal
3	a	basic
4	d	FeO
5	c	Hydrolysis of Sucrose in presence of dil HCl
6	c	Sn / HCl
7	d	charge Carried by 1 mole of electrons
8	a	$Al_2O_3 \cdot n H_2O$
9	d	30 minutes
10	a	HPO_4^{2-}
11	c	$[Fe(CO)_5]$
12	c	+3
13	c	$1s^2 2s^2 2p^6 3s^2 3p^3$
14	a	liquid in gas
15	c	nucleophilic addition

Part - B

16.

minerals	Ores
Naturally occuring Substance obtained by mining which Contain the metals in free state or in the form of Compound like Oxids and Sulphides etc.	It Contain high percentage of metal from which Can be extracted Conveniently and economically are Called Ores.
All the minerals are not Ores	All the Ores are minerals
example: Al is Bauxite and clay	example: Al is Bauxite

17. The electronic Configuration of $Fe^{2+} \Rightarrow [Ar]\ 3d^6$

$Fe^{3+} \Rightarrow [Ar]\ 3d^5$

Fe^{3+} is more stable, Since it has half filled

Kindly send me your answer keys to our email id - padasalai.net@gmail.com

18. **Co-Ordination number:**
The number of ligand donor atom bonded to a Central metal in a Complex number.

19. **Covalent Solids:**
In Covalent Solids, the Constituents (atoms) are bound together in a three dimensional network entirely by Covalent bonds. example: Diamond

20. **Give examples:**
(i) $N_2O_5(g) \longrightarrow 2NO_2(g) + \frac{1}{2}O_2(g)$
(ii) $H_2O_2(aq) \longrightarrow H_2O(l) + \frac{1}{2}O_2(g)$

21. **Limitations of Arhenius Concept:**
(i) It does not explain the behaviour of acids and bases in non aqueous solvents. such as acetone
(ii) does not account for the basicity of the substance like NH_3 which donot passess hydroxyl group.

22. **electrophoresis:**
It is an electrokinetic process which separates Charged particles in a fluid Using a field of electrical charge.

23. (a) 2-methyl-propan 2-ol
(b) Phenyl methanol

24. $CH_3-Br \xrightarrow{NaN_3} \underset{(A)}{CH_3-N_3} \xrightarrow{LiAlH_4} \underset{(B)}{CH_3-NH_2} + N_2$

Part - III

25. A halogen combines with another halogen to form inter halogen compound. eg: ClF, BrF_5

26. It is formed when small atoms like hydrogen B, C, and N are trapped in the interstitial holes in a metal lattice.
* They are used non-stoichiometric compound.

26. Properties of interstitial compound:
* Hard and show electrical and thermal conductivity
* High melting points higher than those of pure metals
* Metalic Carbides are chemically inert.

27. Arrhenius equation:

$$K = Ae^{-\left(\frac{E_a}{RT}\right)}$$

A = Frequency factor R = Gas constant
E_a = Activation energy T = absolute temperature

28. Factors affecting electrolytic Conductance
* when temperature increases the Conductance will also increases.
* when dilution increases, the Conductance will also increases.
* when the viscosity increases, the Conductance will decreases.
* when the dielectric Constant of the solvent increases, the Conductance will also increases

29. Homogenous Catalysis:
The reactants, products and catalyst are present in the same phase

eg: $2SO_{2(g)} + O_{2(g)} \xrightarrow{NO(g)} 2SO_{3(g)}$

30. Preparation of diethyl ether

(i) $C_2H_5-O-Na + Br-C_2H_5 \xrightarrow{\Delta} C_2H_5-O-C_2H_5 + NaBr$

Sodium ethoxide — Ethyl bromide — Diethyl ether

31. Haloform reaction:

$CH_3-CO-CH_3 + 3Cl_2 \longrightarrow CCl_3-CO-CH_3 + NaOH$

$\downarrow$

$CHCl_3 + CH_3COONa$

32. Epimers:

Sugar differing in Configuration at an asymmetric Centre is known as epimers.

Eg: glucose and mannose are epimers at C_2 Carbon and galactose are epimers at C_4 Carbon.

33. $[Ag(NH_3)_2]^+$

(a) ligend $\Rightarrow NH_3$ (b) Central metal ion: Ag^+

(c) IUPAC Name $\Rightarrow$ ~~Dimethyl~~ Diammine Silver(I) ion

~~34~~

Part - IV

34. (a) Gravity Separation process:

* Ore having high specific gravity is separated from the gangue that has low specific gravity by simply washing with running water
* Ore powdered is treated with rapidly following current water.
* During this process the lighter gangue particles are washed away by the running water