



Match the following:

1.

Column A	Column B
1. Metal	Sulphur
2. Non-metal	Magnesium chloride
3. Cat ion	Copper
4. Anion	Na ^a
5. Electrovalent Compound	Cl ⁻
6. Non polar covalent Compound	HCl
7. Polar covalent Compound	CO ₂

2.

Column A	Column B
1. Sodium chloride	Increases
2. Ammonium ion	Covalent bond
3. Electro negativity across the period	Ionic bond
4. Non metallic character down the group	Covalent and co-ordinate bond
5. Carbon tetrachloride	Decreases

3.

COLOUMN A	COLOUMN B
1. Acid salt	Sodium potassium carbonate
2. Mixed salt	Alum
3. Complex salt	Sodium carbonate
4. Double salt	Sodium zincate
5. Normal salt	Sodium hydrogen carbonate

4.

Carbonate	Colour of residue on cooling
Zinc carbonate
Lead carbonate
Copper carbonate

Chapter-5

1. Match the group A with result in group B:

Group A	Group B
1. Number of molecules present in 88g of CO_2	4.25g
2. Number of moles in 128g of SO_2	28.4g
3. Weight of 5.6 liters of NH_3	12.044×10^{23}

4. Volume occupied by 46g NO ₂	22.4 liters
5. Mass of 0.4 moles of Cl ₂	2 moles
6. Atoms in 18g of water	18.66 x 10 ²³

Chapter-6

6. Copy and complete the following table which refers to two practical applications of electrolysis.

Process	Anode	Electrolyte	Cathode
Silver plating a spoon			
Purification of copper			

Chapter-7

7. Match the metals /alloys with their uses:

Metal/ Alloys	Uses
A. S	a. Steel making
B. Lead	b. Aero plane wing
C. Brass	c. Galvanizing
D. Iron	d. Radiation shield
E. Zinc	e. Electrical fittings

Chapter-8

8. Match the following:

1. Fountain experiment	a. Greenish yellow gas
2. Hydrogen chloride gas	b. Gold and platinum
3. Conc. H_2SO_4	c. Fumes in moist air
4. Chlorine	d. Drying agent
5. Aqua regia	e. Extreme solubility

9.

Column-I	Column-II
1. A drying agent of ammonia	a. Ostwald's process
2. Plants which fix nitrogen	b. Nitrolim
3. Process for manufacture of ammonia	c. Ammonium dichromate
4. Compound used in volcano experiment	d. Haber's process
5. Fertilizer	e. Leguminous plants
6. Process for manufacture of nitric acid	f. Calcium oxide

10.

1. Temp. in Haber's process	a. 800°C
2. Catalyst used in Haber's process	b. $[\text{Cu}(\text{NH}_3)_4]\text{SO}_4$
3. Silvery white metal	c. 450°C
4. Temp. in ostwald's process	d. Lead
5. Violet colouration	e. Iron
6. High latent heat of vaporization	f. NCl_3
7. Explosive yellow liquid	g. Urea
8. carbamine	h. ammonia

11.

X	Y	Z
1. Ethanol + Al_2O_3 at 350°C	A. Hydrogenation	A ₁ : Ethane
2. Cane sugar + inverts and zymase [enzymes]	B. Dehydration	B ₂ : Ethane
3. Bromoethane + alcoholic KOH [hot conc.]	C. Fermentation	C ₃ : Ethanol
4. Ethene + hydrogen [catalyst nickel]	D. Pyrolysis [Dehydrogenation]D	D ₄ : Ethyne
5. Ethane + catalyst [$\text{SiO}_2 + \text{Al}_2\text{O}_3$] at 500°C	E. Dehydrohalogenation	E ₅ : Methane F ₁ : Methanol

12.

Compounds	Uses
1. Oxalic acid	a. Production of oxyacetylene flame
2. Ethanol	b. Manufacture of polymers
3. Butane	c. Component of fruit juices
4. Ethyne	d. Important components of LPG
5. Citric acid	e. Removing ink stains
6. Ethene	f. Thermometric liquid

13.

Salt	Method of preparation
a. ammonium sulphate	A. metal + acid
b. calcium carbonate	B. carbonate + acid
c. iron III chloride	C. precipitation (double decomposition)
d. lead nitrate	D. direct combination
e. zinc sulphate	E. titration

14.

Salt	Method of preparation
a. ferrous sulphide	i. oxidation
b. sodium sulphate	ii. synthesis
c. barium sulphate	iii. displacement
d. ferric sulphate	iv. neutralization
e. zinc sulphate	v. precipitation