

Alcohols And Phenols

Q1. What is absolute alcohol ?

Ans: 100% C_2H_5OH is known as absolute alcohol.

Q2. What is rectified spirit ?

Ans: 95% C_2H_5OH is known as rectified spirit.

Q3. Lower alcohols are soluble in water but higher alcohols are not soluble . Why?

Ans: Due to large Hydrocarbon part which hydrophobic.

Q4. Why ether is insoluble in water ?

Ans: Due to absence of HB.

Q5. How is alcohol made unfit for drinking purposes ?

Ans: By adding CH_3OH , $CuSO_4$ and Pyridine

Q6. Phenol is an acid but does not react with $NaHCO_3$. Why?

Ans: Since Phenol feebly weak in nature.

Q7. Diethylether does not react with Na. Why ?

Ans: Due to absence of acidic Hydrogen (Active).

Q8. Propanol has higher B.P. than that of n-Butane. Why?

Ans : In propanol there is HBonding but in n-Butane there is no HBonding.

Q9. Mixture of o- & p-Nitrophenol is separated by Steam volatile . Why ?

Ans: Due to intramolecular HB in O-Nitrophenol.

Q10. Out of o- & p-Nitrophenol which one is more volatile ?

Ans: O-Nitrophenol due to intramolecular HB.

Q11. IUPAC Name of Dimethylether is –

Ans: Methoxymethane

Q12. IUPAC Name of Isobutyl alcohol is –

Ans: 2-Methylpropanol

Q13. What is anisol ?

Ans: Methyl phenyl ether

Q14. Give an example of 3° alcohol.

Ans: Dimethylethanol

Q15. What is phenetol ?

Ans :Ethylphenyl ether($C_6H_5-O-C_2H_5$)

Q16.Phenol gives litmus test but not alcohol. Why?

Ans:

S.N.	Compounds	
	Phenol	Alcohol
1.	More Acidic due to $-I$ effect	Less Acidic due to $+I$ effect

Q17.What is Lucas Reagent ?

Ans: Anhydrous Zinc Chloride +Conc.HCl

Q18.Dimethyl ether is more volatile than ethanol . Why?

Ans: Due to absence of HB.

Q19.Which product will obtain by dehydration of ethanol ?

Ans: Ethene.

Q20. Out of But-2-en-1-ol and 2-Butanol which one shows Cis&Trans isomerism ?

Ans:But-2-en-1-ol will show Cis&Trans isomerism .

By Tinsukia Region

CHAPTER 12

1 Marks Questions

Q1. Write IUPAC Name of Acetone .

Ans: Propanone

Q2.Draw the structure of –Isobutyraldehyde.

Ans: $CH_3-CH(CH_3)-CH_2-CHO$

Q3.Write the IUPAC Name of Caproic Acid.

Ans: Hexanoic Acid.

Q4.What is Fehling's Solution 'A'?

Ans: Aqueous solution of $CuSO_4$.

Q5.What is the Tollen's Reagent?

Ans: Ammonical Silver Nitrate Solution .

Q6. Arrange the following compounds in the increasing order of their B.P.

$\text{CH}_3\text{CHO}, \text{CH}_3\text{CH}_2\text{OH}, \text{CH}_3\text{OCH}_3, \text{CH}_3\text{CH}_2\text{CH}_3$

Ans: $\text{CH}_3\text{CH}_2\text{CH}_3 < \text{CH}_3\text{OCH}_3 < \text{CH}_3\text{CHO} < \text{CH}_3\text{CH}_2\text{OH}$

Q7. Arrange the following compounds in the increasing order of their reactivity in nucleophilic Addition reaction-

Ethanal, Propanal, Propanone, Butanone

Ans: Butanone < Propanone < Propanal < Ethanal

Q8. Write the structure of 3-Hydroxy butanal.

Ans: $\text{CH}_3-\text{CH}(\text{OH})-\text{CH}_2-\text{CHO}$

Q9. B.P. of ketone & aldehyde is higher than that of hydrocarbons of comparable molecular mass why?

Ans: Due to dipole-dipole interaction in carbonyl compounds.

Q10. What is formalin ?

Ans: 40% aqueous solution of HCHO .

Q11. What is Vinegar?

Ans: 8% solution of acetic acid.

Q12. Formic Acid is more acidic than acetic acid why?

Ans: Due to +I effect in acetic acid

Q13. What is Per-Fluoro acetic acid?

Ans: CF_3COOH

Q14. Acidic nature of carboxylic acid is higher than Phenol Why?

Ans: Carboxylate ions are more stable than Phenoxide ions.

Q15. Out of Propionaldehyde and Acetone, which more reactive ?

Ans: Acetone

Q16. What is Schiff's base ?

Ans: $\text{RCH}=\text{NR}'$

Q17. Out of CH_3CHO & HCHO which compound will give aldol condensation ?

Ans: CH_3CHO

Q18. Out of CH_3CHO & HCHO which compound will give Cannizzaro's Reaction ?

Ans: HCHO

Q19. Write oxidation product of Propanol.

Ans: Propanoic Acid

Q20. What is PCC?

Ans: Pyridinium Chloro Chromate

CHAPTER 13

10 MARKS QUESTIONS

Q1. Give an example tertiary amine.

Ans: Trimethyl amine

Q2. Write the IUPAC Name of ethyl amine

Ans: Ethanamine

Q3. Which amine is more basic CH_3NH_2 or $(\text{CH}_3)_3\text{N}$ in Gaseous Phase ?

Ans: $(\text{CH}_3)_3\text{N}$

Q4. What is the Zwitterion ?

Ans: Dipolar ion

Q4. Give an example of Zwitter ion.

Ans: $\text{H}_3\text{N}^+-\text{CH}_2-\text{COO}^-$

Q5. Write the IUPAC Name of $\text{CH}_2=\text{CHCN}$.

Ans: Pro-2-enenitrile

Q6. Give one important use of Phenyl isocyanide .

Ans : As insecticide

Q7. B.P. of 1° Amine is higher than that of secondary amine of comparable molecular mass why?

Ans: Due to more Number of HB.

Q8. Ethyl amine is soluble in water but Aniline does not why?

Ans: Due to HB in Ethyl amine

Q9. Which amine gives Carbyl amine test ?

Ans: Primary(1°) Amine

Q10. Write the IUPAC Name of $(\text{CH}_3)_3\text{N}$.

Ans: N,N-Dimethylmethanamine

Q11. Arrange the following in the decreasing order of basic strength.

$\text{C}_6\text{H}_5\text{NH}_2$, $(\text{C}_2\text{H}_5)_2\text{NH}$, $\text{C}_2\text{H}_5\text{NH}_2$, NH_3

Ans: $(\text{C}_2\text{H}_5)_2\text{NH} > \text{C}_2\text{H}_5\text{NH}_2 > \text{NH}_3 > \text{C}_6\text{H}_5\text{NH}_2$

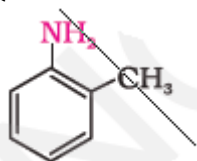
Q12. Aniline is less basic than ammonia why?

Ans: Due to +R effect in Aniline

Q13. Why are aliphatic amines stronger bases than aromatic amines ?

Ans: There is +I effect in aliphatic amines and -I effect in aromatic amines.

Q14. Write the IUPAC Name of --



Ans: 2-Methylaniline

Q15. Which is more basic triethyl amine or Diethyl amine in Gaseous state ?

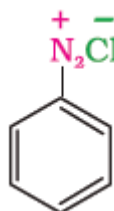
Ans: Diethyl amine

Q16. Which of followings have higher K_b , H_2O or NH_3 ?

Ans: NH_3

Q17. Write the structure of Benzenediazonium chloride.

Ans:



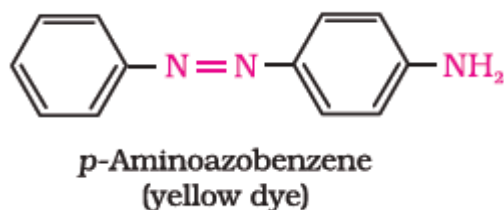
Q18. What is Hinsberg's Reagent ?

Ans: Benzenesulphonyl Chloride ($\text{C}_6\text{H}_5\text{SO}_2\text{Cl}$)

Ans: CH_3NH_2

Q20. Write the structure of p- Amino azobenzene.

Ans:



CHAPTER 14 1 MARK QUESTION

Q1. What is invert sugar ?

Ans: Mixture of glucose & Fructose

Q2. Which disaccharide is present in milk ?

Ans: Lactose

Q3. Which Polysaccharide is present in Rice ?

Ans: Starch

Q4. Write hydrolysis product of Lactose.

Ans: Glucose & Galactose

Q5. Name the carbohydrate which is not digested in human body ?

Ans; Cellulose

Q6. Which Functional groups are present in glucose ?

Ans : -OH & CHO

Q7. What are the constituents of Maltose ?

Ans: 2 Units of α -D-glucose

Q8. What are the constituents of Starch ?

Ans: Amylose & Amylopectin

Q9. Which Polysaccharide is stored in the Liver of Animals ?

Ans: Glycogen

Q10. Name two Carbohydrates which act as byfuels?

Ans: Starch & Glycogen

Q11. Write the water soluble vitamins .

Ans: Vitamin B & Vitamin C

Q12. Give an example of Fibrous Protein .

Ans: Keratin

Q13. Give two examples of essential amino acids .

Ans: Valine & Lysine

Q14. Name the Enzymes present in the saliva of Human.

Ans: Amylase

Q15. What is Glycogen ?

Ans: Polysaccharide

Q16. What type of bonding occurs in globular Proteins ?

Ans: Van der Waal's interaction , Dipolar interaction , H-bond.

Q17 Which bio-molecules act as catalyst ?

Ans: Enzyme

Q18. Name the enzyme which breaks proteins into peptides ?

Ans: Pepsin & Trypsin

Q19. Name the purines present in DNA >

Ans: Adenine and Guanine

Q20 Name the base that is found in RNA only .

Ans: Uracil

CHAPTER 15 1 MARK QUESTIONS

Q1. Write the monomers of Bakelite.

Ans: Phenol & Formaldehyde

Q2. Give the chemical name of Teflon.

Ans: PTFE

Q3. What is the main constituent of Rubber ?

Ans: Butadiene & Styrene

Q4. Name a synthetic polymer which is an amide ?

Ans: Nylon-66

Q5. Name a polymer used to make cups for hot drinks?

Ans: Urea formaldehyde resin

Q6. Name one thermosetting & one thermoplastic polymer>

Ans: PVC & Bakelite

Q7 Name a synthetic polymer which is an ester.

Ans: Terylene

Q8. Give an example of Step –Growth Polymer .

Ans: Terylene

Q9. Write the monomers of Neoprene

Ans: Chloroprene

Q10 Write monomers of Nylon-66

Ans: Hexamethylenediamine & Adipic acid

Q11. Write the Full form of PMMA.

Ans: PolyMethylMethAcrylate

Q12. What is the vulcanisation ?

Ans: Heating of natural rubber with sulphur .

Q13.What is PHBV?

Ans: Poly- β -hydroxybutyrate-Co- β -hydroxyvalerate

Q14. Give an example of Bio-degradable polymer ?

Ans: PHBV

Q15. What do you hy Buna-S ?

Ans: Butadiene & Styrene

Q16.Arrange the following Polymers in increasing order of intermolecular force.

Nylon-66,Buna-S,Polythene

Ans:Buna-S<Polythene<Nylon-66

Q17.Name a polymer used in non-stick utensils.

Ans: Tefflon

Q18. What do you understand for 6&6 in Nylon -66 ?

Ans: Both 6 shows number of carbon atoms in monomers.

Q19.What do you mean by Bu- , na& N in Buna-N.

Ans: Bu-Butadiene ,na-Sodium (Na) and N- Acrylonitrile

Q20. Write the monomers of Melamin Formaldehyde Resin.

Ans: Melamin& Formaldehyde

CHAPTER 16 1MARK QUESTIONS

Q1.Name two types of chemical messangers.

Ans: Neurotransmitters & Hormones

Q2. Name the antibiotic used in typhoid fever.

Ans:Chloramphenicol

Q3.Name a Broad spectrum Antibiotic.

Ans;Chloramphenicol

Q4. Name the Medicine which can act as analgesic as well as antipyretic .,

Ans: Aspirin

Q5. Name the constituents of Dettol.

Ans; Chlroxyleneol&terpineol

Q6. Why is Ethanal added to Soap ?

Ans: To make it transparent

Q7. Name an ant acid which prevent the formation of acid in the stomach.

Ans : Ranitidine

Q8. Why is glycerol is added to shaving soap?

Ans: To prevent rapid drying.

Q9. Give an example of bacteriocidal antibiotic.

Ans: Penicillin

Q10.Name a drug used in mental depression .

Ans: Equanil

Q11. Name a few artificial sweatners

Ans: Saccharin & Aspartame

Q12. What type drugh is phenacetine?

Ans: Antibiotic

Q13.What are pathogens?

Ans; Disease causing organisms.

Q14.Name two Narcotics which are used as analgesics >

Ans: Morphine & Codeine

Q15. What is Chemotherapy?

Ans: Use of chemical for treatment of disease .

Q16. Mention a few drug targets .

Ans: Carbohydrates, Lipids , Proteins & Nucleic Acids .

Q17. Define a Tranquilizer.

Ans: Drug which act on CNS to help in reducing anxiety.

Q18.Define Soap .

Ans: Soap is a Sodium or Potassium salt of Fatty Acids

Q19.Why are detergents preferred over soaps ?

Ans: Unlike soaps detergents can be used even in hard water.

Q20.What is a Bacteriostatic drug ?

Ans: A drug which inhibit the growth of disease causing organisms.