STD: XI

ONE MARK TEST - 7 CHEMISTRY

Lesson: 13

Marks: 30 / Time: 45 Min.

Choose the correct answer.

1. 2 - butyne on chlorination gives

a) 1 - chloro butane

c) 1, 1, 2, 2 – tetra chloro butane

b) CH4 and CO2

2. The compounds formed at anode in the electrolysis of an aqueous solution of potassium acetate are c) C2 H6 and CO2

d) C2 H6 and Cl2

a) CH₄ and H₂ 3. Pyrolysis of Methane and respectively are

a) Exothermic & Endothermic

c) Both are endothermic

b) Endothermic & Exothermic

d) Both are exothermic

b) 1, 2 - dichloro butane

d) 2, 2, 3, 3 - tetra chloro butane

4. The correct statement regarding the comparison of staggered and eclipsed conformations of ethane, is a) the eclipsed conformation of ethane is more stable than staggered conformation even though the

eclipsed conformation has torsional strain

b) the staggered conformation of ethane is more stable than eclipsed conformation, because staggered conformation has no torsional strain

c) the staggered conformation of ethane is less stable than eclipsed conformation, because staggered conformation has torsional strain

d) the staggered conformation of ethane is less stable than eclipsed conformation, because staggered conformation has no torsional strain

5. Benzene is molecule.

a) Tetrahedral

b) Planar

c) Trigonal

d) Square planar

6. Which among the following alkenes on reductive ozonolysis produces only propanone?

a) 2 – Methyl propene

b) 2 - Methyl but - 2 - ened) 2, 3 - Dimethyl but - 2 - ene

c) 2, 3 - Dimethyl but - 1 - ene7. Which is non-benzenoid aromatic compound?

a) Benzene

b) Azulene

c) Toluene

d) Phenol

8. The C-H bond and C-C bond in ethane are formed by which of the following types of overlap

a) $sp^3 - s$ and $sp^3 - sp^3$ b) $sp^2 - s$ and $sp^2 - sp^2$

c) sp - sp and sp - sp d) p - s and p - p

9. Acetylene can be obtained by the electrolysis of the following compound

a) Potassium fumerate b) Potassium succinate

c) Potassium acetate

d) Potassium formate

10. Benzene is purified by

a) distillation

b) fractional distillation

c) Evaporation

d) sublimation

11. Which of the following is optically active

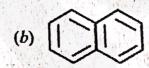
a) 2 – Methyl pentane b) Citric acid

c) Glycerol

d) none of these

12. Which one of the following is non-aromatic?









13. The peroxide effect involves

a) Ionic mechanism

c) Heterolytic fission of double bond

b) Free – radical mechanism

d) Homolytic fission of double bond

 C_2H_5 Br + 2Na Dry ether C_4H_{10} + 2NaBr

The above reaction is an example of which of the following

a) Reimer Tieman reaction

b) Wurtz reaction

c) Aldol condensation

d) Hoffmann reaction

15. Pyridine is said to be

a) Acyclic

b) Aliphatic

c) alicyclic

d) heterocyclic

16. Baeyer's reagent is

a) Aqueous bromine solution c) Acidified permanganate solution

b) Neutral permanganate solution

d) Alkaline potassium permanganate solution

	17. Major product of the below mentioned reaction is, $(CH_3)_2C = CH_2$	<u>ICI</u> →
	a) 2 - chloro - 1 - iodo - 2 - methyl propane c) 1,2 - dichloro - 2 - methyl propane d) 1, 2 diiodo - 2 - methyl propane ls. Isomerisation in alkane can be brought by using a) Al ₂ O ₃ b) Fe ₂ O ₃ c) Anh.AlCl ₃ /HCl at 200°C d) Cone. H ₂ SO ₄ ls. Some meta-directing substituents in aromatic substitution are given. Which one is most deactivating? a) - COOH b) - NO ₂ c) - C = N d) - SO ₃ H located and compound (A) is a) CH ₃ (CH ₂) ₃ Br	
	b) CH ₃ (CH ₂) ₅ Br	
	c) CH ₃ (CH ₂) ₃ CH(Br)CH ₃	
	d) CH ₃ - (CH ₂) ₂ - CH (Br) - CH ₂ CH ₃ 21. The following substance reacts with water to give ethane a) CH ₄ b) C ₂ H ₅ MgBr c) C ₂ H ₄ OH 22. In which of the following molecules, all atoms are co-planar	d) C ₂ H ₅ OC ₂ H ₅
	a) (b) (c) ()	d) both (a) and (b)
	23. Identify the compound 'Z' in the following reaction $C_2H_6O = \frac{Al_2}{623}$	$O_3 \longrightarrow X \xrightarrow{O_3} Y \xrightarrow{Zn/H_2O} (Z)$
The state of the s	a) Formaldehyde b) Acetaldehyde c) Formic acid 24. The following substance is used as anti-knocking compound a) TEL b) Lead tetrachloride c) Lead acetate 25. The IUPAC name of the following compound is CI CH ₂ -CF	d) none of these d) C ₂ H ₂ PbCl
した からなくでは人様は、からとの変形を	a) trans - 2 - chloro-3 iodo - 2 - pentane b) cis - 3 - iodo - 4 - chloro - 3 - pentane c) trans - 3 - iodo - 4 - chloro - 3 - pentene d) cis - 2 chloro - 3 - iodo - 2 - pentene 26. Which one of the following is not an ortho-para director?	
	a) $- NO_2$ b) $- CH_3$ c) $- OH$	$d) - C_2H_5$
-	27. The compound that will react most readily with gaseous bromine h	as the formula
	a) C_3H_6 b) C_2H_2 c) C_4H_{10}	d) C ₂ H ₄ The compounds formed
	c) reduction of 1 – chloro propane d) reduction of	ium metal on iodomethane
	29. The most stable conformation of n-Butane is	d) All one consilly stable
	a) Eclipsed b) Skew c) Staggered	d) All are equally stable
	30. Consider the nitration of benzene using mixed con H ₂ SO ₄ and HN to the mixture, the rate of nitration will be	103 II a large qualitity of KH5O4 IS adder
	a) unchanged b) doubled c) faster	d) slower