

## PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	C is -2 butene on reaction with bromine give 2,3 -dibromobutane which is	A. Racemic mixture B. Meso isomer C. Dextro isomer D. Levo isomer
2	D(+) glyceraldehydes has the absolute configuration.	A. E- B. S- C. E- D. Z-
3	Which configuration has lowest potential energy.	A. Eclipsed B. Staggered C. Skew D. All have same energy
4	Which of the following property has a higher value for trans isomer as compared to cis isomer.	A. Density B. Dipole moment C. Melting point D. Boiling point
5	Stereoisomers not related to each other as object and mirror image are called.	A. Enantiomers B. Diastereoisomers C. Conformations D. Antipodes
6	Different arrangement of groups in space which can be converted into one another by rotation around a single bond are called.	A. Conformations B. Metamers C. Enantiomers D. All of the above
7	Which of the following is capable of showing optical isomerism.	A. $\text{CH}_3\text{COCOOH}$ B. $\text{CH}_3\text{CHOHCOOH}$ C. Both a and b D. All of these
8	Which of the following molecules can exhibit geometrical isomerism.	A. $\text{CH}_3\text{CH}=\text{CH}_2$ B. $\text{CH}_3\text{CH}=\text{CHCH}_3$ C. $(\text{CH}_3)_2\text{C}=\text{CH}_2$ D. $\text{CH}_3\text{CH}=\text{C}(\text{CH}_3)_2$
9	Various compounds corresponding to molecular formula $\text{C}_4\text{H}_{10}$ are.	A. Functional isomers B. Position isomers C. Chain isomers D. None of the above
10	Alkyl cyanide and alkyl isocyanides are	A. Tautomers B. Metamers C. Functional isomers D. None of the above
11	Compounds HCN and HNC are.	A. Tautomers B. Metamers C. Functional isomers D. Conformers
12	In the Friedel-Craft acylation, the amount of $\text{AlCl}_3$ that must be taken is	A. In catalytic amount B. One equivalent C. More than one equivalent D. Amount does not matter
13	Toluene is o/p -orienting with respect to an electrophilic substitution reaction due to.	A. +I effect of the methyl group. B. +I as well as +H effect of the methyl group C. Hyper conjugation between the methyl group and phenyl ring. D. +R effect of the methyl group
14	1-Butyne on oxymercuration -demercuration would give.	A. Butanone B. Butanal C. Propanol and methanol D. Propanoic acid and formic acid
15	The electrophile in the sulphonation of benzene is.	A. $\text{SO}_3$ B. $\text{SO}_3\text{H}$ C. $\text{HSO}_4$ D. $\text{H}_2\text{SO}_4$

		D. SO <sub>2</sub>
16	Nitrobenzen can be prepared from benzene by using a mixture of conc. HNO <sub>3</sub> and conc. H <sub>2</sub> SO <sub>4</sub> In the nitrating mixture. HNO <sub>3</sub> acts as a.	A. Base B. Acid C. Oxidizing agent D. Catalyst
17	Among the following statements in the nitration of aromatic compounds, the false one is.	A. The rate of nitration of benzene is almost the same as that of hexadeutero benzene B. The rate of nitration of toluene is greater than that of benzene C. The rate of nitration of benzene is greater than that of hexadeutero benzene. D. Nitration in an electrophile substitution reaction.
18	Chlorination of toluene in the presence of light and heat followed by treatment with aqueous NaOH gives.	A. o - crealol B. p - crealol C. 2,4 -dihydroxy toluene D. Benzoic acid
19	The reaction of toluene with chlorine in the presence of light gives.	A. Benzoyl chloride B. Benzyl chloride C. m-chlorotoluene D. Mixture of o and p -chlorotoluene
20	Each of the following compound is an aromatic except.	A. Benzene B. Naphthalene C. Cyclopentadienyl cation D. Cyclopentadienyl anion
21	Who proved that all the six hydrogen atoms in benzen are equivalent.	A. Kekule B. Ladenburg C. Faraday D. Wohler
22	When propyne is treated with aqueous H <sub>2</sub> SO <sub>4</sub> in the presence of HgSO <sub>4</sub> the functional isomer of the major product obtained in.	A. Propanal B. Acetone C. Propane 2 -ol D. Propanol
23	The addition HCl to 2-pentene give	A. 3-Chloropentane B. 2- Chloropentyne C. 2- Chloropentane D. 2-Chloro-2-methyl butane
24	The reduction of an alkyne to alkene using Lindlar's catalyst results into	A. Syn addition of hydrogen atoms B. Anti addition of hydrogen atoms C. A mixture obtained by syn and anti addition of hydrogen which are equilibrium with each other D. A mixture obtained by syn and anti addition of hydrogen which are not in equilibrium with each other.
25	Hydrocarbon X (C <sub>6</sub> H <sub>12</sub> ) on oxidation with hot alkaline (KMnO <sub>4</sub> ) gives a mixture of prop ionic acid and dimethyl ketone. The structure of compound X is	A. CH <sub>3</sub> CH = CHCH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub> B. (CH <sub>3</sub> ) <sub>2</sub> C = CH CH <sub>2</sub> CH <sub>3</sub> C. CH <sub>3</sub> CH <sub>2</sub> CH = CHCH <sub>2</sub> CH <sub>3</sub> D. (CH <sub>3</sub> ) <sub>2</sub> C = C (CH <sub>3</sub> ) <sub>2</sub>
26	Which of the following products is obtained when but 2-ene is treated with perchloric acid.	A. CH <sub>3</sub> CHO only B. CH <sub>3</sub> COOH only C. CH <sub>3</sub> CHO and CH <sub>3</sub> COOH D. CH <sub>3</sub> CH <sub>2</sub> COOH + HCOOH
27	The addition of HCl in the presence of peroxide does not follow anti Markovnikov's rule because.	A. HCl bond is too strong to be broken homolytically B. Cl atom is not reactive enough to add on to a double bond C. Cl combines with H to give back HCl D. HCl is a reducing agent.
28	The addition of Br <sub>2</sub> to cis 2-butene produces.	A. (+) 2,3 - dibromobutane only B. (-) 2,3 -dibromobutane only C. (+) 2,3, dibromobutane D. meso-2,3, -dibromobutane
29	Which of the following is not obtained when Br <sub>2</sub> is added to ethylene in the presence of aqueous NaCl solution.	A. Br CH <sub>2</sub> CH <sub>2</sub> Br B. Br CH <sub>2</sub> CH <sub>2</sub> Cl C. ClCH <sub>2</sub> CH <sub>2</sub> Cl D. ClCH <sub>2</sub> CH <sub>2</sub> Cl
		A. 3-o > > 2-o > > 1-o > > B. 3-o > > 2-o > > 1-o > > C. 3-o > > 2-o > > 1-o > >

C.  $3 \times 2$  &  $1 \times 2$   
D.  $3 \times 2$  &  $1 \times 2$