

Time: One Hour

Max. Marks: 25

Instructions

Solve any 25 questions from Q1 to Q30

- 1 The force of attraction that keeps atoms together is called
- (A)Atom (B)atomic structure (C)chemical bond (D)energy level
- 2 Carbon atom in CH₄ is
- (A)Tetravalent (B)divalent (C)monovalent (D)trivalent
- 3 Boron atom in BF₃ is
- (A)Trivalent (B)monovalent (C)tetravalent (D)divalent
- 4 Benzene reacts with acetic anhydride in presence of AlCl₃ to form.....
- (A)benzophenone (B)phenyl acetic acid (C)phenyl acetate (D)acetophenone
- 5 When the carbon atom is SP³ hybridized in a compound, it is bonded to atoms.
- (A)2 other (B)4 other (C)3 other (D)5 other
- 6 What is bond angle between hybrid orbital of CH₄ molecule.....o
- (A)180 (B)120 (C)109.5 (D)115.5
- 7 The fission of covalent bond in which both acquire single electron is called....
- (A)hemolytic (B)heterolytic (C)anisotropic (D)metameric
- 8 Which of the following is electrophile ...
- (A)H⁺ (B)OH⁻ (C)OR⁻ (D)RNH₂
- 9 Which of the following is Lewis acid....
- (A)CH₃OH (B)AlCl₃ (C)NH₃ (D)CH₃OCH₃
- 10 The fission of covalent bond in which both acquire single electron is called....
- (A)hemolytic (B)heterolytic (C)anisotropic (D)metameric
- 11 The reaction in which an atom or group of atom are replaced by other atom or group is called....
- (A)rearrangement (B)addition (C)elimination (D)Substitution
- 12 Carbocation is Hybridized.
- (A)Sp (B)SP² (C)SP³ (D)none
- 13 The carbon atom which possess unpaired electron is called.....
- (A)carbocation (B)carbanion (C)free radical (D)carbene
- 14 CH₃COCH₃ & CH₃CH₂CHO exhibit isomerism.
- (A)Chain (B)metamerism (C)functional (D)tautomerism
- 15 Stereoisomers which are not mirror images of each other but non super imposable are called
- (A)Enantiomers (B)diastereoisomers (C)metamers (D)none
- 16 In reaction alkyl halide in presence of dry ether reacts with Na or Zn to form higher alkane
- (A)Wurtz (B)Kolbe (C)Corey- House (D)none
- 17 The unsaturated hydrocarbon containing at least one C-C double bond are called.....
- (A)free radicals (B)alkynes (C)alkenes (D)alkanes
- 18 Alkyl halide on heating with alc. KOH solution gives.....
- (A)Alkane (B)alkene (C)alkyne (D)none
- 19 Peroxide effect occurs according to.....
- (A)Markownikof's rule (B)anti markownikof's rule (C)Initiation (D)none
- 20 SN₁ reaction is
- (A)nucleophilic unimolecular reaction (B)nucleophilic bimolecular reaction (C)nucleophilic reaction (D)none
- 21 Nitration of benzene gives
- (A)Nitrobenzene (B)O-nitro benzene (C)nitro toluene (D)none
- 22 Toluene on oxidation with alkaline KMnO₄ solution gives.....
- (A)benzoic acid (B)toluene (C)none (D)methyl cyclohexane
- 23 2-butene reacts with HBr to give
- (A)1-bromo butane (B)2,3- dibromo butane (C)2-bromo butane (D)bromo butane
- 24 Which is correct bond length of following
- (A)HI > HBr > HCl > HF (B)HBr > HCl > HF > HI (C)HI > HCl > HF > HBr (D)none
- 25 Lactic acid exhibits isomerism
- (A)optical (B)rotational (C)functional (D)none
- 26 How many structural isomers are possible for C₄H₉Cl
- (A)3 (B)4 (C)5 (D)2

Examination October 2020

27 Which of the following cycloalkane is most reactive....

- (A)cyclohexane (B)cyclobutane (C)cyclopentane (D)cyclopropane

28 The triple bond consist of

- (A)1 sigma & 2 pi bond (B)2 sigma bond (C)3-pi bond (D)2 sigma & 1pi bond

29 Benzene react with acetic anhydride in presence of $AlCl_3$ to form.....

- (A)benzophenone (B)phenyl acetic acid (C)phenyl acetate (D)acetophenone

30 Which of the following compound is undergoes nitration most easily....

- (A)Nitrobenzene (B)benzoic acid (C)Toluene (D)benzene