35340 : Pharmaceutical Organic Chemistry - I : BP 202 T

P. Pages : 2
Time : Three Hours

AW - 2339
Max. Marks : 75

Notes : 1. Answer **all** question.
2. Illustrate your answer necessary with the help of neat sketches.
3. Discuss the reaction, mechanism wherever necessary.

1. a) Multiple choice Questions. **10**

1) Acetic acid is obtained when acetaldehyde is oxidized with potassium dichromate and ----------.
   a) HNO_3 b) HCL
   c) Sulphuric acid d) Oxalic acid

2) Which of the following reactions may be associated with aldehyde and ketone.
   a) Nucleophilic addition b) Polymerization
   c) Oxidation d) All of the above

3) Which of the molecule does not undergoes the aldol condensation.
   a) Formaldehyde b) Acetaldehyde
   c) Glyceraldehyde d) All of them

4) Methyl alcohol is not used as –
   a) A solvent b) An anti freezing agent
   c) A substitute of petrol d) For denaturing of ethyl alcohol

5) What is the order of Kinetic in SN^2 mechanism.
   a) Zero b) First
   c) Second d) Both zero and first

6) In the primary alkyl halide the halogen atom is attached to with –
   a) One carbon atom b) Two carbon atom
   c) Three carbon atom d) Four carbon atom

7) Chlorination of alkane is an example the reaction which is –
   a) Elimination reaction b) Free radical
   c) Substitution reaction d) None of them

8) Alkane also known as -
   a) Paraffines b) Olefins
   c) Saturated hydrocarbons d) (a) and (c) both

9) Order of ease of halogenation in alkane is –
   a) $I_2 > Cl_2 > Br_2 > F_2$ b) $F_2 > Cl_2 > I_2 > Br$
   c) $F_2 > Cl_2 > Br_2 > I_2$ d) $Cl_2 > Br_2 > F_2 > I_2$

10) Which molecule react with conjugated dienes to give cyclohexene in Diels-alder reaction.

a) Phenol b) Dienophile
c) Hexane d) Bromophenol

b) Solve the following – **10**

a) Draw the molecular structure of 2-chloro 5,5 diethyl hexane.

b) Draw the molecular structure of Methanol.

c) Draw the molecular structure of 2-Methyl butanoic acid.

d) Write the uses of Ethanol.

e) Write the uses of citric acid.

2. Solve the following **any two.** **20**

1) What is E_2 reaction, write in detail about reaction mechanism, kinetics, energy profile diagram and stereochemistry of E_2 reaction.

2) What is SN^1 reaction write in detail about its mechanism, kinetics, energy profile diagram and stereochemistry of SN^1 reaction.

3) Discuss the reactions of alkane with special emphasis on halogenation.

3. Solve the following **any seven.** **35**

1) What is isomerism in organic compound, write about structural isomerism.

2) What is hybridization write about SP^3 hybridization in alkane.

3) Write about Markownikoff's orientation and Anti Markownikoff's orientation.

4) Write qualitative tests of cetostearyl alcohol.

5) Write detail about Cannizzaro reaction.

6) What is condensation, write about Benzoin condensation.

7) Write about the Basicity of Amines (Aliphatic) and note on uses of Amphetamine.

8) Write about uses of Glycerol.

9) Write about uses of Acetyl salicylic acid.

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