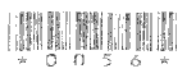


B. Pharm. Second Semester (New)
35340 : BP 202 T - Pharmaceutical Organic Chemistry – I

P. Pages : 2

Time : Three Hours



AU - 0708

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.

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- 1) The reaction of propane with bromine is called ----
 - a) addition
 - b) combustion
 - c) halogenation
 - d) elimination
- 2) The product of the reaction ($\text{CH}_3 - \text{CH} = \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3 + \text{Br}_2$) is
 - a) $\text{CH}_3 - \text{CHBr} - \text{CHBr} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
 - b) $\text{CH}_3 - \text{CH} - \text{CHBr}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
 - c) $\text{CH}_2 = \text{CHBr} - \text{CHBr} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
 - d) $\text{CH}_3 - \text{CHBr} = \text{CH} - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$
- 3) The order of reactivity of alkane with halogen is -----
 - a) $\text{I}_2 > \text{Br}_2 > \text{Cl}_2 > \text{F}_2$
 - b) $\text{F}_2 > \text{Cl}_2 > \text{Br}_2 > \text{I}_2$
 - c) $\text{F}_2 > \text{I}_2 > \text{Cl}_2 > \text{Br}_2$
 - d) $\text{Cl}_2 > \text{Br}_2 > \text{F}_2 > \text{I}_2$
- 4) An alkene with five carbon atom contains ---- hydrogen atom.
 - a) 10
 - b) 11
 - c) 12
 - d) None of these
- 5) The combustion of alkane will produce ----- and water.
 - a) SO_2
 - b) CO_2
 - c) SO_3
 - d) NO_2
- 6) Which of following is branched chain hydrocarbon.
 - a) ethene
 - b) 2 - butene
 - c) 3 - methyl - 2 - butene
 - d) 2 - pentene
- 7) IUPAC name of $\text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{C}(\text{CH}_3)_2 - \text{CH}_2 - \text{CH}_3$ is ----
 - a) 3,3 - dimethyl hexane
 - b) 2 - ethyl - 2 methyl pentane
 - c) Octane
 - d) None of the above
- 8) The functional group contained in ethanol is -----
 - a) $-\text{COOH}$
 - b) $-\text{OH}$
 - c) $-\text{O}-$
 - d) $-\text{C}=\text{O}$
- 9) Alkyl halide under goes ---- reaction.
 - a) Nucleophilic
 - b) Electrophilic
 - c) both (a) & (b)
 - d) None of above

- 10) HCHO is -----
- | | |
|-----------------|-------------|
| a) Acetaldehyde | b) methanol |
| c) Formaldehyde | d) acetone |

b) Answer the followings

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- 1) Define diastereomers with example.
- 2) Define hybridization.
- 3) Draw the structure of 2,3-dichlorobutane.
- 4) What is meant by conjugated dienes?
- 5) Give uses of acetone.

2. Long Answer Questions. Answer any two.

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- 1) Give various reactions of alkanes. Explain in detail about chlorination of methane.
- 2) Discuss in detail about $\text{S}_\text{N}1$ reaction with stereochemistry.
- 3) Explain in detail about $\text{E}1$ & $\text{E}2$ reactions.

3. Short Answer Questions. Answer any seven.

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- 1) Give reaction and mechanism of HBr^+ addition.
- 2) Discuss about sp^3 hybridization.
- 3) Explain about Markovnikov and anti-markovnikov rule.
- 4) Discuss about structural isomerism.
- 5) Discuss reactions of conjugated dienes.
- 6) Discuss aldol condensation.
- 7) Give method of preparation and reaction of alcohol.
- 8) Discuss basicity of amines.
- 9) Explain about diastereomers with examples.
