

ECAT Chemistry Chapter 19 Aliphatic Hydrocarbons

Sr	Questions	Answers Choice
1	The empirical formula of benzene is determined by	A. IR spectra B. U.V C. Elemental analysis D. NMR spectra
2	Vinyl acetylene combines with HCl to form	A. Poly acetylene B. Benzene C. Chloroprene D. Divinylacetylene
3	The addition of unsymmetrical reagent to an unsymmetrical alkene is in accordance with the rule	A. Hund's rule B. Markowikov's rule C. Pauli's exclusion principle D. Auf ban principle
4	The treatment of benzene with isobutene in the presence of sulphuric acid give	A. isobutyl benzene B. tert-Butyl benzene C. n- Butyl benzene D. no reaction
5	The electron releasing effect of methyl group is significant and it makes ring a good	A. Electrophilic B. Nucleophilic C. Nucleophobic D. Hydrophobic
6	Hybridization in alkanes is:	A. sp B. sp ² C. sp³ D. dsp ²
7	Acetylene when treated with 10% H ₂ SO ₄ in the presence of HgSO ₄ adds one molecule of water to form	A. Aldehydes B. Esters C. Alcohols D. Acids
8	The compound prepared by a substitution reaction of benzene is	A. Acetophenone B. Glyoxal C. Cyclohexame D. Hexabromo cyclohexane
9	The four bonds of carbon in methane are directed towards the corners of	A. Cube B. Pentagon C. Hexagon D. Tetrahedron
10	Catalytic oxidation of alkanes is used for the preparation of	A. Adehydes B. Ketones C. Fatty acid D. Carboxylic acids
11	The difference between amount of heat actually released and that of calculated is called	A. Bonding energy B. Activation energy C. Resonance energy D. Transition energy
12	Free radical mechanism of halogenation of alkanes follow step:	A. Initiation B. Propagation C. Termination D. All of these
13	Incomplete oxidation of alkanes yields	A. CO₂ & carbon black B. CO ₂ + heat C. CO and carbon black D. CO + heat
14	Alkanes are generally not reactive towards acids, alkalis, oxidation or reducing agents. They however undergo some reactions, which one is the reaction undergone by alkanes	A. Elimination B. Addition C. Free radical substitution D. Nucleophilic substitution
15	Mustard gas is a :	A. Gas B. Liquid C. Solid

16 Question Image

- A. Pent-1-ene-3-yne
- B. 2-pentyne-4-ene
- C. 1-pentene-3-yne
- D. Pent-2-yne-4-ene

17 sp^3 hybird orbitals are oriented at an angle of

- A. 107.5°
- B. 108.5°
- C. 109.5°
- D. 103.5°

18 Question Image

- A. 2, 3-dimethylbutane
- B. 2, 3-methylbutane
- C. 2-dimethylbutane
- D. Dimethylbutane

19 Electronegativity difference in C-C bond in alkanes is:

- A. Zero
- B. Double
- C. Half
- D. 4.0

20 Octane number can be changed by

- A. Isomerisation
- B. Alkylation
- C. Cyclisation
- D. All of these