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CHM102
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1. One of these statements is not true

--->> Alkanes burn in excess of air or oxygen to give carbonmonoxide and water

Combustion is highly exothermic

the heat of combustion of pentane is 2549 KJmol⁻¹

Combustion is the most important reaction of alkanes

2. All but one of these is involved in alkylation

ethyne

sodium amide

Grignard reagent

--->> Diels-Alder reagent

3. One of the statements is not true of dienes.

They general formula $C_n H_{2n-2}$

They are called diolefins

They are isomeric with alkynes

--->> divided into two main classes depending on the relative positions of the two double bonds in the molecule:

4. _____ can be defined as an atom or group of atoms in a molecule which exhibits characteristic chemical properties

hybridization

--->> functional group

covalent bond

ionic bonding

5. _____ best describes the functional group of an alkene.

$/(C\equiv C/)$

--->> $/(C=C/)$

$/(C=O?)$

$/(C\equiv C/)$

6. Hydrocarbon can be classified as _____

alkane, alkene, alkyne

amine, amide, imine

ester, ketone, aldehyde

--->> aliphatic, alicyclic, aromatic

7. Addition of ethyne to sodamide in ether yields sodium etynide and one of the following compounds

--->> ammonia

water

Hydrogen sulphide

ethane

8. Reactions that lead to the attachment of an alkyl group to a molecular fragment are called _____.

dealkylation

esterification

carboxylation

--->> alkylation

9. A catalyst mixed with a selective inhibiting agent is called _____ catalyst.

Basic

Neutral

--->> Poisoned

Acidic

10. In the _____ alkynes, the triple bond lies at the end of the carbon chain.

Internal

external

--->> terminal

interim