1) Hydrocarbons containing only single bonds between the carbon atoms are called _____.
A) alkenes
B) alkynes
C) aromatics
D) alkanes
E) ketones

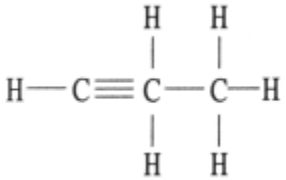
2) Hydrocarbons containing carbon-carbon triple bonds are called _____.
A) alkanes
B) aromatic hydrocarbons
C) alkynes
D) alkenes
E) olefins

3) Alkynes always contain a _____.
A) C=C bond
B) C≡C bond
C) C–C bond
D) C=H bond
E) C≡H bond

4) The minimum number of carbons necessary for a hydrocarbon to form a branched structure is _____.
A) 4
B) 6
C) 3
D) 9
E) 12

5) Alkenes have the general formula _____.
A) C_nH_{2n}
B) C_nH_{2n-2}
C) C_nH_{2n+2}
D) C_nH_n
E) $C_{2n}H_n$

6) The compound below is an _____.



A) alkyne
B) alkene
C) alkane
D) aromatic compound
E) olefin

7) The general formula of a carboxylic acid is _____.
A) R–O–R'
B) R–CO–R'
C) R–CO–OH
D) R–H
E) R–CO–OR'

8) How many isomers are possible for C_4H_{10}?
A) 1
B) 2
C) 3
D) 4
E) 10

9) Alcohols are hydrocarbon derivatives in which one or more hydrogens have been replaced by a hydroxyl functional group. _____ is the general formula of an alcohol.
A) R–O–R
B) R–CO–R
C) R–CO–OH
D) R–OH
E) R–CO–H

10. Draw three different isomers for pentane-

Answers-

1. D
2. C
3. B
4. A
5. A
6. A
7. C
8. B
9. D
10.