instruction : ALL QUESTION CARRY EQUAL MARK

question : Hydrocarbons containing only single bonds between the carbon atoms are called .....
option : Alkenes
option : Alkynes
option : Aromatics
answer : Alkanes
option : Ketones

question : Empirica formula expresses the actual number of mole of each elements in a molecule
option : True
answer : False

question : Empirical formula expresses the ratio of the number of mole of atoms of elements in a molecule of a compound.
answer : True
option : False

question : An hydrocarbon with vapour density 28 contain 85.7 % carbon and 14.3 % hydrogen. deduce the empirical formula of the compound
option : C₂H₂
option : C₂H
answer : C H₂
option : C₅H₂
option : C₂H₄

question : Isomerism is a phenomenon whereby two or more compounds have different molecular formula.
option : True
answer : False

question : The following are types of isomerism except
option : Structural isomerism
option : Geometric isomerism
option : Optical isomerism
answer : Homologous isomerism

question : An homologous series is a family of organic compounds in which successive members differ in thier molecular formulae by one CH₄group
option : True
answer : False

question : The follow are characteristics of a homologous series except
option : The member conform to general molecular formula
option : There i a gradual change in the physical properties of the member as relative molecular mass increases
answer : the members are prepared by using different general mehods
option : The members show similar chemical properties

question : Saturated hydrocarbons contain only carbon- carbon single bonds
answer : True
option : False

question : UnSaturated hydrocarbons contain only carbon- carbon singl bonds
answer : False
option : True

question : All cycloalkanes have..... general formula
answer : C_nH_{2n}
option : C_nH_{2n}+2
option : C_nH_{2n} - 2
option : C_nH_n
option : C_{2n}H_{2n}

question : All alkanes have..... general formula
option : C_{2n}H_{2n}
option : C_nH_n
answer : C_nH_{2n}+2
option : C_nH_{2n}- 2
option : C_nH_{2n}

question : An organic compound contains 79 % of carbon and 21 % of hydrogen by mass. if 1 dm³ of the compound weighs 1.30g , find its empirical formula.
option : CH₅
option : CH₄
option : CH₂
option : CH
answer : CH₃

question : An organic compound contains 60 % of carbon, 13.3 % hydrogen and 26.

7 % oxygen by mass. find its empirical formula.
answer : C₃H₈O
option : C₄H₇O
option : CHO
option : C₂H₄O
option : C₃H₈O₃

question : An organic compound contains 50 % of carbon 20 % hydrogen and 30 % oxygen by mass. find its empirical formula.
answer : C²H₁₀O
option : C²H₃O
option : C⁶H₁₀O
option : C²H₉O
option : C²H₁₀O₃

question : An organic compound contains 69 of carbon and 31% of hydrogen by mass. find its empirical formula.
answer : CH₅
option : C₄H₅
option : CH_{4CH₅}
option : CH₇
option : 5CH₅

question : An organic compound contains 40% of carbon, 21% of hydrogen and 39 % by mass. find its empirical formula.
option : CH₉O₄
answer : CH₉O
option : CH₄O
option : CH₉O₂
option : C₃H₉O

question : An organic compound contains 30 % of carbon, 25 % hydrogen and 45 % oxygen by mass. find its empirical formula
option : CH₅O
option : C³H₁₀O
option : CH₁₀O₂
answer : CH₁₀O
option : CH₁₀O₄

question : Hydrocarbons containing only single bonds between the carbon atoms are called 庬.
option : Alkenes
option : Aromatics
option : Ketones
option : Alkynes
answer : Alkanes

question : W hat general class of compounds is also known as olefins?
answer : Alkenes
option : Aromatics
option : Alkanes
option : Alkynes
option : Ketones

question : Hydrocarbons containing carbon-carbon triple bonds are called 庬庬..
option : Alkanes
option : Aromatic hydrocarbons
answer : Alkynes
option : Alkenes
option : Olefins

question : Alkynes always contain a 庬庬庬
option : carbon-carbon single bonds
option : carbon-carbon double bonds
option : carbon-carbon triple bonds
answer : carbon-carbon triple and double bonds
option : All of the above

question : Alkenes always contain a 庬庬庬..
option : carbon-carbon single bond
answer : carbon-carbon double bonds
option : carbon-carbon triple bonds

question : Hybridization of the carbon-carbon double bonds is 庬庬庬庬.
option : SP
answer : SP²
option : SP³
option : SP⁴
option : SP⁵

question : Hybridization of the carbon-carbon triple bonds is 庬庬庬庬
answer : SP
option : SP²
option : SP³
option : SP⁴
option : SP⁵

question : The molecular geometry of each carbon atom in an alkane is.....
option : Octahedral
option : Trigonal pyramidal
option : Square planar
answer : Tetrahedral
option : Trigonal planar

question : The minimum number of carbons necessary for a hydrocarbon to form a branched structure is 庬庬庬..
option : 1
option : 2
option : 3
answer : 4
option : 5

question : Cyclohexane has 庬庬庬.fewer hydrogens than n-hexane
option : 1
answer : 2
option : 3
option : 4
option : 5

question : How many structural isomers of butane exist?
option : 1
answer : 2
option : 3
option : 4
option : 5

question : How many structural isomers of pentane exist?
option : 1
option : 2
answer : 3
option : 4

option : 5

question : How many structural isomers of methane exist?
option : 0
answer : 1
option : 2
option : 3
option : 4

question : How many structural isomers of propane exist?
option : 0
answer : 1
option : 2
option : 3
option : 4

question : Aromatic rings contain a total of (4n +2) non declocalized pi electrons.
option : True
answer : False

question : The general formula of an alkene is .....
answer : C_nH_{2n}
option : C_{2n}H_{2n}
option : C_nH_n
option : C_nH_{2n} +2
option : C_nH_{2n} - 2

question : The general formula of cycloalkane is.....
answer : C_nH_{2n}
option : C_nH_n
option : C_{2n}H_{2n}
option : C_nH_{2n} - 2
option : C_nH_{2n} +2

question : The name of CH₃-CH₂-CH₂=CH₂ is.....
option : But- 1- yne
option : But- 1- ena
answer : But- 1- ene
option : But- 2- ene
option : Butane- 1- ene

question : How many structural isomers of hexane exist?
option : 1
option : 2
option : 3
option : 4
answer : 5

question : The name of CH₃-CH₂=CH₂ - CH₃ is.....
option : 1- butene
option : 1- butane
answer : 2- butene
option : 3- butane
option : 4- butene

question : The name of CH₃-CH₂=CH₂ - CH₂-CH₂-CH₃ is...
option : Hex- 2- ane

option : Hexane- 2- ene
option : Hexyne- 2- ene
answer : Hex- 2- ene
option : Hex- 2- eneien

question : Cycloalkanes are alkanes that contain a ring of three or more
answer : True
option : False

question : The IUPAC name of CH₂=C=CH₂ is .....
option : Propa-1,1-diene
answer : Propa-1,2-diene
option : Propa-1,3-diene
option : Propa-1,4-diene
option : Propa-1,5-diene

question : The IUPAC name of CH₂=CH-CH=CH-CH₃
option : 1,1-pentadiene
option : 1,2-pentadiene
answer : 1,3-pentadiene
option : 1,4-pentadiene
option : 1,5-pentadiene

question : The IUPAC name of CH₃-CH=C=CH-CH₃ is .....
option : 1,1-pentadiene
option : 1,3-pentadiene
option : 2,1-pentadiene
answer : 2,3-pentadiene
option : 2,4-pentadiene

question : The IUPAC name of CH₃-CH₂-CH=CH
answer : But-1-ene
option : But-2-ene
option : But-3-ene
option : But-4-ene
option : But-5-ene

question : The IUPAC name of CH₂=CH-CH=CH=CH₂
option : Penta-1,4,5-triene
answer : Penta-1,2,5-triene
option : Penta-2,4,5-triene
option : Penta-1,3,5-triene
option : Penta-1,4,6-triene

question : The IUPAC name of CH₂=C=C=CH₂
answer : But-1,2,3-triene
option : But-2,2,3-triene
option : But-1,5,3-triene
option : But-1,2,4-triene
option : But-4,2,3-triene

question : In naming an organic compound the longest continuous chain containing the fuctional group (double or trible bonds) is numbered in a direction that gives the functional group the lowest possible number.
answer : True
option : False

question : In naming of organic compounds a chain that has more than one substituents are not cited in alphabetical order.
option : True

answer : False

question : If counting in either direction results in thesame number for the alkane functional group, the correct name is the one containing the lowest substituent number.
answer : True
option : False

question : when ethyne is bubled in to bromine water in a test tube a colourless liquid results. The reaction which occured is.....
answer : Addition reaction
option : Substitution reaction
option : Decompositoin reaction
option : Hydrogenation reaction
option : Polymerization reaction

question : Alkynes have the general formula C_n H_{2n} - 2 when hydrogenated with 2 moles of hydrogen, they produce compounds with general formula
answer : C_nH_{2n}
option : C_nH_{2n} -2
option : C_nH_{2n}+2
option : C_nH_{2n} +1
option : C_nH_{2n} -1

question : Three different hydrocarbons A, B, C were passed into three seperate test tube containing acidified KMnO₄ . A and B decourized the acidified KMnO₄ which C showed no visible reaction . A and B must be
answer : Unsaturated Hydrocarbon
option : Saturated Hydrocarbon
option : Akanes
option : Cycloalkanes
option : Butane

question : Alkenes and Alkynes react thesame with the following except.....
option : Acidified KMnO₄ solution
option : Bromine water
answer : Ammonical AgNO₃ solution

question : C₂H₆ can not undergo .....
option : substitution reaction
answer : Addition reaction

question : Internal alkynes are alkynes with triple bonds located else where along the chain
answer : True
option : False

question : Terminal alkynes are alkynes with triple bonds located else where along the chain
option : True
answer : False

question : Terminal alkynes are alkynes with triple bonds located at the end of the chain
answer : True
option : False

question : what is the Bond angle of metane.....
answer : 109.5^o
option : 106.5^o
option : 209.5^o
option : 129.5^o
option : 119.5^o

question : A primary carbon atom is one whicm is bonded to only one other carbon atom
answer : True
option : False

question : A secondary carbon atom is one whicm is bonded directly to two other carbon atoms
answer : True
option : False

question : A tertiry carbon atom is one whicm is bonded directly to three other carbon atoms
answer : True
option : False

question : Complete the cumbustion reaction CH₄ + 2O₂ → ? + 2H₂O
option : CO
answer : CO₂
option : CO₃
option : 2CO₂
option : 3CO₂

question : The reaction of alkanes with halogens is an addition reaction
option : True
answer : False

question : Complete the reaction CH₃Cl + Cl₂ → ? + HCl in presence of ultraviolent light
option : CH₂Cl₃
option : CH₃Cl₃
option : CH₂Cl₄
option : CHCl₂
answer : CH₂Cl₂

question : Complete the reaction CH₄ + Cl₂ → CH₃Cl + ? in presence of ultraviolent light
answer : HCl
option : 2HCl
option : 3HCl
option : 4HCl
option : 5HCl

question : Complete the reaction ROH + ? → RCl + HCl + POCl₃
option : PCl
option : PCl₂
option : PCl₃
option : PCl₄
answer : PCl₅

question : Complete the reaction CH₂Cl₂ + Cl₂ → CH₂Cl₂ + ? in presence of ultraviolent light
option : CH₂Cl₃
option : 2CH₂Cl₂
option : CH₂Cl₂
answer : HCl
option : 2HCl

question : Complete the reaction ? + Cl₂ → CH₂Cl₂ + HCl in presence of ultraviolent light
option : CH₃Cl
answer : CH₂Cl₂
option : CH₂Cl₂ + HCl

option : CH₁Cl₃
option : CH₂Cl₃

question : Complete the reaction ? + Cl₂ → CCl₄ + HCl in presence of ultraviolent light
option : CH₂Cl₃
option : CH₃Cl
option : CH₃Cl₂
answer : CHCl₃
option : CH₂Cl₂

question : Complete the reaction CHCl₃ + Cl₂ → ? + HCl in presence of ultraviolent light
option : CH₂Cl₂
option : CHCl₃
answer : CCl₄
option : CH₂Cl₄
option : CH₃Cl₂

question : A sigma bond is stronger than a pie bond
answer : True
option : False

question : There is restriction of rotation about the multible bonds as agaist free rotation about single bonds.
answer : True
option : False

question : Carbon - carbon bond have bond angle at 130^o to each other leading to a planar structure
option : True
answer : False

question : Carbon - carbon bond have bond angle at 109.5^o to each other leading to a linear structure
option : True
answer : False

question : Geometric isomers are different compounds which have the same structure but different arrangement of their atoms in space.
answer : True
option : False

question : For an alkene to show geometric isomerism, each carbon of the double bond have two differnt atoms or groups attached to it.
answer : True
option : False

question : ..... could be the formula of an alkene.
option : C₃H₈
answer : C₃H₆
option : C₆H₆

question : In general, ...are the most reactive hydrocarbons.
option : Alkenes
answer : Alkynes
option : Alkanes
option : Cycloalkanes
option : Olefins

question : The addition of HBr to 2-butene produces .....
option : 1-bromobutane
answer : 2-bromobutane
option : 1,2-dibromobutane
option : 2,3-dibromobutane
option : No reaction

question : ..... is the reagents necessary to yield the product of the reaction CH₂= CH₂ → Ethane
answer : H₂/Pt
option : 2H₂/Pt
option : H₄/Pt
option : H₂/Pt/Ag
option : 3H₂/Pt

question : ..... is the reagents necessary to yield the product of the reaction CH₂= CH₂ → Chloroethane
option : 3HCl
option : H₂Cl
option : HCl₂
option : 2HCl
answer : HCl

question : Like alkanes, alkenes and alkynes undergo combustion reactions
answer : True
option : False

question : Alkenes and alkynes also undergo addition reactions
answer : True
option : False

question : An addition reaction is a reaction in which the atoms from one molecule are added to another molecule to form a single molecule
answer : True
option : False

question : Hydrogenation of an alkene requires high temperatures and a catalyst such as
answer : Ni
option : Na
option : Ng
option : Mg
option : Ca

question : The addition of HBr to 2- Butene produces.....
option : 1- bromobutane
answer : 2- bromobutane
option : 1, 2- bromobutane
option : 2, 3- bromobutane
option : No reaction

question : The addition of Br₂to ethene produces.....
option : 1, 1- dibromoethane
answer : 1, 2- dibromoethane
option : 2, 2- dibromoethane
option : 2, 3- dibromoethane
option : No reaction

question : The addition of Br₂to ethyne produces.....
answer : 1, 2- dibromoethene
option : 1, 2- dibromoethane

option : 1, 2 - dibromoethyne
option : 2, 2 - dibromoethene
option : 1, 1- dibromoethene

question : What is the product of H₂C=CH₂ + O₃ →
option : H₂C=O
option : H₂C=O + H₂C=CH₂
option : 3H₂C=O
answer : H₂C=O + H₂C=O
option : Noreaction

question : An alkynes react with one mole of hydrogen to give.....
option : Alkanes
option : Alkones
option : Saturated hydrocarbon
answer : UnSaturated hydrocarbon
option : No reaction

question : Which one of the following could be a cyclic alkane.....
option : C₅H₅
answer : C₃H₆
option : C₄H₆
option : C₂H₆
option : C₉H₂₀

question : The reaction of Ag₂NO₃ with a sample yield a white precipite. this reaction is only possible with.....
option : Alkanes
option : Alkenes
option : Alkynes
option : Internal Alkynes
answer : Terminal Alkynes

question : What is the product of addition of Ag₂NO₃ to alkene is.....
option : Saturated hydrocarbons
option : Unsaturated hydrocarbon
answer : No reaction

question : What is the product of addition of Ag₂NO₃ to alkane is.....
option : Alkenes
option : Alkanes
option : Alkanal
option : Alkanose
answer : No reaction

question : What is the product of addition of Ag₂NO₃ to ethene is.....
option : Ethane
option : Ethene
option : Ethyne
option : Butane
answer : No reaction

question : What is the product of addition of Ag₂NO₃ to Propane is.....
option : 1, 2 - Propan
option : 1- propane
option : 3, 2- propaene
option : 1, 3- propane
answer : No reaction

question : What is the product of addition of Ag₂NO₃ to 1, 2, - dimethyl

Propane is.....
option : 2, propane
option : 1, 3 - propane
option : proene
option : 1, 3, 4 - butane
answer : No reaction

question : What is the product of addition of Ag₂NO₃ to Propene is.....
option : Propane
option : 1, 2 - propanol
option : Butanol
option : Propanal
answer : No reaction

question : The reaction between unsaturated hydrocarbons and water in presence of acid is called?
answer : Acid - catalyzed reaction
option : Water - catalyzed reaction
option : Based - catalyzed reaction
option : Acid, based - catalyzed reaction
option : Hrogenation - catalyzed reaction

question : What is the product of CH₃ - CH₂ - CH=CH₂ + HCl
option : Chlorobutane
option : 1- Chlorobutane
answer : 2 - Chlorobutane
option : 3 - Chlorobutane
option : 4 - Chlorobutane

question : What is the product of CH₃ - CH₂ - CH=CH₂ + H₂ in presence of a catalyste
option : 1, 2 - butane
option : 1- butane
option : 2- butane
option : propane
answer : Butane

question : What is the product of CH₃ - CH₂ - CH=CH₂ + HBr
option : Bromobutane
option : 1- bromobutane
answer : 2- bromobutane
option : butane
option : No reaction

question : Addition of hydrogen to an alkene is called?
option : Base- Catalytic hydrogenation
option : Base- Catalytic reaction
option : Acid- Catalytic hydrogenation
answer : Catalytic hydrogenation
option : No reaction

question : What is the product of CH₃ - CH₂ - CH=CH₂ + H₂O
option : Butane
option : 2- Butane
option : Butanol
option : Butene
answer : No reaction

question : Fluorine is not always used in the addition reaction of unsaturated hdrocarbons because the reaction with fluorine is?

option : slow
option : Fast
answer : Explosive
option : No reaction

question : Complete the reaction CH₄ +?→ CO₂ +2H₂O
option : O
option : 2O
option : O₂
answer : 2O₂
option : 3O₂

question : Complete the reaction CH₄ +? → CO₂ +2H₂O
option : O
option : 2O
option : O₂
answer : 2O₂
option : CH CO₂ +2H₂O

question : Complete the reaction CH₄ +2O₂ → CO₂ +?
option : H₂O
option : H₂
option : 2H₃O
answer : 2H₂O
option : No reaction

question : The addition of bromine solution can be used as qualitative test for the presence of unsaturation
answer : True
option : False

question : Markonikovs rule state that the more electropositive part of the reagent should go to carbon bond that has the lesser number of hydrogen atoms
option : True
answer : False

question : Markonikovs rule state that The more electropositive part of the reagent should go to carbob bond that has the lesser number of hydrogen atoms
option : True
answer : False

question : The members of homologous series conform to a different general molecular formula
option : True
answer : False

question : The members of homologous series conform to the same general molecular formula
answer : True
option : False

question : The members of homologous series change gradually in their physical properties as the relative molecular mass increases
answer : True
option : False

question : The members of homologous series does not changes in their physical properties as the relative molecular mass increases
option : True
answer : False

question : The members of homologous series are prepared using thesame general methods

answer : True
option : False

question : The members of homologous series are prepared using different general methods
option : True
answer : False

question : The members of homologous series show similar chemical properties
answer : True
option : False

question : The boiling and melting points of straight chain hydrocarbon increases with increasing molar mass
answer : True
option : False

question : The boiling and melting points of straight chain hydrocarbon decreases with increasing molar
option : True
answer : False

question : The branch chain isormers boil at lower temperatures than the isomeric straight chain
answer : True
option : False

question : The branch chain isormers boil at higher temperatures than the isomeric straight chain
option : True
answer : False

question : The greater the degree of branching in isomer, the lower is its boing point
answer : True
option : False

question : The greater the degree of branching in isomer, the higher is its boing point
option : True
answer : False

question : For the following chemical reaction C_x H_y + 5O₂ → 3CO₂ + 4H₂O. What is C_xH_y?
option : Ethene
option : Ethane
option : Propene
answer : Propane
option : Butane

question : The formula forchlorobenzene is .....
option : C₆H₆Cl
answer : C₆H₅Cl
option : C₆Cl H₆
option : C₆Cl H₅

question : Addition of HI to cyclohexene will give.....
option : Cyclohexene
option : Iodohexene
option : Iodocyclohexene
answer : Iodocyclohexane
option : Iodocyclohexyne

question : Addition of HCl to cyclobutene will give.....
option : Butene

option : Clorobutane
option : Clorocyclobutene
answer : Clorocyclobutane
option : No reaction

question : Addition of HBr to cyclohexene will give.....
option : cyclohexene
option : Bromocyclohexene
answer : Bromocyclohaxene
option : 2- Bromocyclohexene
option : Bromocyclohexyne

question : Addition of H₂ to cyclohexene in presence of Ni as a catalyst will give.....
option : Hexene
option : Cyclohexene
answer : Cyclohexane
option : Cyclohexyne
option : No reaction

question : Addition of H₂ to propyne in presence of Ni as a catalyst will give.....
option : Propane
answer : Propene
option : Propyne
option : 2- Propane
option : No reaction

question : What is the product of addition of CH₃ CH₂ = CH₂ +HBr→
option : 2- propane
option : 2- butanepropane
answer : 2- bromopropane
option : 1, 2 buapropane
option : 1, 2 - bromopropane

question : What is themajor product of the reaction between 2- methyl- 2- butene and HI
option : 2- iodo- 3- methylbutene
option : 3- iodo- 2- methylbutene
answer : 2- iodo- 2- methylbutene
option : 2- methylbutene
option : No reaction

question : 1- bromo- 5- methyl- 3- hexene is as example of terminal alkyne.....
option : True
answer : False

question : 1- bromo- 5- methyl- 3- hexene is as example of internal alkyne.....
answer : True
option : False

question : 3- iodo- 2- chloro- 4- octyne is an example of internal alkyne
answer : True
option : False

question : 3- iodo- 2- chloro- 4- octyne is an example of terminal alkyne
option : True
answer : False

question : 3- iodo- 2- chloro- 1- octyne is an example of terminal alkyne
answer : True

option : False

question : 3-iodo-2-chloro-1-octyne is an example of interinal alkyne
option : True
answer : False

question : 1-butyne is an example of terminal alkyne
answer : True
option : False

question : 1-butyne is an example of internal alkyne
option : True
answer : False

question : Terminal alkynes are less reactive than internal alkynes toward the addition of of water
answer : True
option : False

question : W hat is the major product of reaction between 3-hexyne with excess HBr.....
option : 2-dibromohexene
option : 3-dibromohexene
option : D ibromohexene
answer : 3, 3 - dibromohexane
option : No reaction

question : There is free rotation around carbon-carbon single bond
answer : True
option : False

question : There is free rotation around carbon-carbon trple bonds
option : True
answer : False

question : The rotation around a carbon-carbon double bond is considerably restricted
answer : True
option : False

question : W hat is the product of the chemical reaction CH₃Cl + Cl₂ → ? in the presence of sun light
option : CH₄ + HCl
option : CH₃Cl + HCl
answer : CH₂Cl₂ + HCl
option : CH₄ + HCl + H₂O
option : CH₃ + HCl

question : The general formula for the combustion of alkane is.....
option : C_x H_x + (X + Y/4)O₂ → xCO₂ + (y/2) H₂O
option : C_x H_y + (x + Y/2)O₂ → xCO₂ + (y/2) H₂O
option : C_x H_y + (X + Y/4)O₂ → yCO₂ + (y/2) H₂O
option : C_x H_y + (X + Y/4)O₂ → xCO₂ + (y/4) H₂O
answer : C_x H_y + (X + Y/4)O₂ → xCO₂ + (y/2) H₂O

question : D etermine the molecular formula of an open chain alkane with vapour density 29
option : CH
option : CH₄

option : C₃H₄
option : C₂H₄
answer : C₃H₈

question : Which of the following is not a metal catalyst for the hydrogenation of an alkene?
option : Pd
option : Pt
option : Ni
answer : Na

question : An alkene absobs one mole of hydrogen in the presence of a catalyst to give 3, 4 - dimethylhexane. What is the name of the alkene
option : 2, 3- dimethylhex- 3- ene
option : 3, 3- dimethylhex- 3- ene
option : 2, 3- dimethylhexane
option : 3, 4- dimethylhexane
answer : 3,4- dimethylhex- 3- ene

question : The followiong are addition reaction that akenes and alkyne undergo except
option : Hydrogenation
option : HalogenationHa
option : Hydrohalogenation
answer : Hypohalogenation

question : The expected Markovnikovs addition reaction of HI to 2- metyl- 2- butene is
option : 2- iodopentane
option : 1- iodo- 2- methylbutane
answer : 2- iodo- 2- methylbutane
option : 2- iodo- 1- methylbutane
option : 3- iodo- 2- methylbutane

question : What is the IUPAC name of the expected major product fomed upon reaction of HCl with 1- butene
option : 1- chlorobutane
answer : 2- chlorobutane
option : 1- chlorobutene
option : 2- chlorobutene
option : 1,2- chloroutane

question : What is the expected major product fomed upon reaction of one mole of hydrogen with alkene
answer : Alkane
option : Alkene
option : Alkyne
option : Halogenation
option : No reaction

question : What is the expected major product fomed upon reaction of one mole of hydrogen with alkyne
option : Alkane
answer : Alkene
option : Alkyne
option : Halokene
option : No reaction

question : Ozonolysis is the reaction of an alkane with Ozone
option : True
answer : False

question : Ozonolysis is the reaction of an alkene with trioxogen (Ozone)

answer : True
option : False

question : What is the product formed when 5- chloro-1-meyhylcyclohexene is reduced with a Pt catalyst and H₂
option : 1-chloro-5-methylcyclohexane
answer : 1-chloro-3-methylcyclohexane
option : 5-chloro-1-methylcyclohexane
option : 5-methylcyclohexane
option : No reaction

question : Whic of the following reagents can accomplish the transformation of alkene to alkane
option : Pt/Ni/H₂
option : Pt/H
option : Ni/H
option : Ni/Pt
answer : Ni/H₂

question : How many moles of hydrogen are consumed in the catalytic reduction of 1mole of 1,3-dibromocyclohexa-1,4-diene
option : 1
answer : 2
option : 3
option : 4
option : 5

question : How many moles of hydrogen are requred to completely reduce of 1mole of cis-2,3,3-trimetylhepta-1,5-diene
option : 0
option : 1
answer : 2
option : 3
option : 4

question : How many moles of hydrogen are consumed in the catalytic reduction of 1mole of 1,3-dibromocyclohexa-4-diene
option : 0
answer : 1
option : 2
option : 3
option : 4

question : How many moles of hydrogen are requred to completely reduce of 1mole of cis-2,3,3-trimetylhepta-1-diene
option : 0
answer : 1
option : 2
option : 3
option : 4

question : In conducting a catalytic hydrogenation of an alkene, which catalyst listed is most likely soluble in the reaction medium
option : Ni
option : Pt
option : Pd
answer : Wikinson
option : No reaction

question : Which of the following will yield 2-methylpentane upon catalytic hydrogenation?
option : 2-methyl-1-pentene

option : 2- methyl- 2- pentene
option : 4- methyl- 2- pentene
option : 4- methyl- 1- pentene
answer : All of the above

question : What is the expected major product upon reaction of 1- pentene with Cl₂?
option : 2,2- dichloropentane
option : 1,1- dichloropentane
option : 2- chloropentane
option : 1- chloropentane
answer : 1,2- dichloropentane

question : Treating 2- methyl- 2- pentene with Br₂ is expected to produce which of the following as the major product?
answer : 2,3- dibromo- 2- methylpentane
option : 3,3- dibromo- 2- methylpentane
option : 2,2- dibromo- 2- methylpentane
option : 2- bromo- 2- methylpentane
option : 3- dibromo- 2- methylpentane

question : The Markovnikov product, resulting from an addition reaction to an unsymmetrical alkenes, is formed because
option : The product is statistically favoured.
answer : The reaction proceeds via the more/most stable carbonation.
option : Steric hindrance favours its formation.
option : The reaction forms the more/most stable product.
option : All of the above are valid reasons

question : What is the correct name for the compound, CH₃- CH₂CH=CH- CH₂CH=CH- CH₃
option : 1, 5- octadiene
answer : 2, 5- octadiene
option : 3, 5- octadiene
option : 3, 6- octadiene
option : 2, 6- octadiene

question : Predict the product of the catalytic hydrogenation of 6- ethyl- 3- decene.
option : 3- ethyldecane
option : 4- ethyldecane
option : 5- ethyldecane
answer : 6- ethyldecane
option : 7- ethyldecane

question : Hydrogenation of what alkyne produces propane?
option : Propane
option : Propene
answer : Propyne
option : Propynal
option : Propynol

question : The term resonance may be defined as a phenomenon whereby a molecule can be represented by two or more structures which have different arrangement of their atoms but same arrangements of their electrons
option : True
answer : False

question : Pentane has lower boiling point than all its isomers?
option : True
answer : False

question : The boiling point of haloalkanes increases with increase with chain length when keeping the halogen constant.
answer : True
option : False

question : The boiling point of haloalkanes increases with increasing halogen substituent.
answer : True
option : False

question : The boiling point of haloalkanes increases with a decrease in chain branching for any given set of isomers.
answer : True
option : False

question : What is the correct name for CH₃ CH₂ -CH=CH-CH₂- CH=CH- CH₃
option : Octadiene
option : 25-Octadiene
option : 5, 2-Octadiene
option : 1, 5-Octadiene
answer : 2, 5-Octadiene

question : Hydrogenation of which alkyne will produce propane in excess hydrogen molecule ?
option : propan
option : propane
option : propene
answer : propyne

question : Hydrogenation of which alkene will produce propane
option : propa
option : propane
answer : propene
option : propyne
option : All of the above

question : What is the product of the reaction between HI and cyclohexene
option : Cyclohene
option : Cyclohenecycloiodine
answer : Cyclohexyliodide
option : Cyclohexeneliodide
option : Cyclohexane

question : What is the major product of the reaction between 2-methyl-2-butene and HI
option : iodo-2-methylbutane
option : 1-iodo-2-methylbutane
option : 2-iodo-3-methylbutane
answer : 2-iodo-2-methylbutane
option : 2-iod-methylbutane

question : What is the product of the reaction between alkyne and 2moles of hydrogen ?
option : Halogen
option : Alkalogen
option : Alkene
answer : Alkane
option : alkyne

question : Complete this reaction C₂ H₆ + ? → 2CO₂ + 3H₂O
option : O₂
option : 2O₂

option : 3/2O ₂
option : 5/2O ₂
answer : 7/2O ₂

question : Complete this reaction C₂ H₆ + 7/2O ₂ → 2CO ₂ +?
option : 3H₂O ₂
answer : 3H₂O
option : H₂O
option : 2H₂O
option : 3H₂

question : Complete this reaction ? + 7/2O ₂ → 2CO ₂ + 3H₂ O
option : CH
option : 2 C₂H₆
answer : C₂H₆
option : 3 C₂H₆
option : 4 C₂H₆

question : Complete the reaction C₃H₈ + ? → 3CO ₂ + 4H₂O
option : O ₂
option : 2O ₂
option : 3O ₂
option : 4O ₂
answer : 5O ₂

question : Complete the reaction ? + 5O ₂ → 3CO ₂ + 4H₂O
option : CH
option : C₂H₈
option : C₃H₄
answer : C₃H₈
option : C₃H₃

question : Complete the reaction C₃H₈ + 5O ₂ → ? + 4H₂O
option : CO ₂
option : 2CO ₂
answer : 3CO ₂
option : 4CO ₂
option : 5CO ₂

question : Complete the reaction C₃H₈ + 5O ₂ → 3CO ₂ +?
option : H₂O
option : 2H₂O
option : 3H₂O
answer : 4H₂O
option : 4H₄O

question : Complete the reaction C₄H₁₀ + 9O ₂ → 4CO ₂ +?
option : H₂O
option : 2H₂O
option : 3H₂O
option : 4H₂O
answer : 5H₂O

question : Complete the reaction C₄H₁₀ + 9O ₂ → ? +

5H₂O
option : CO₂
option : 2CO₂
option : 3CO₂
answer : 4CO₂
option : 5CO₂

question : Complete the reaction C₄H₁₀ + ? → 4CO₂ + 5H₂O
option : 5O₂
option : 6O₂
option : 7O₂
option : 8O₂
answer : 9O₂

question : Complete the reaction ? + 9O₂ → 4CO₂ + 5H₂O
option : C₄H
option : C₂H₁₀
option : C₂H₈
answer : C₄H₁₀
option : C₇H₁₀

question : Complete the reaction ? + 11O₂ → 5CO₂ + 6H₂O
option : C₅H₁₆
option : C₃H₁₂
option : C₅H₁₁
option : C₃H₈
answer : C₅H₁₂

question : Complete the reaction C₅H₁₂ + ? → 5CO₂ + 6H₂O
answer : 11O₂
option : 12O₂
option : 13O₂
option : 14O₂
option : 15O₂

question : Complete the reaction C₅H₁₂ + 11O₂ → ? + 6H₂O
option : CO₂
option : 2CO₂
option : 3CO₂
option : 4CO₂
answer : 5CO₂

question : Complete the reaction C₅H₁₂ + 11O₂ → 5CO₂ + ?
option : 2H₂O
option : 3H₂O
option : 4H₂O
option : 5H₂O
answer : 6H₂O

question : A monohydric alcohols contain..... number of OH group
answer : 1
option : 2
option : 3
option : 4

option : 5

question : A dihydric alcohols contain..... number of OH group
option : 1
answer : 2
option : 3
option : 4
option : 5

question : the boiling points of alcohols are substantially higher than those of hydrocarbons of comparable molar masses
answer : True
option : False

question : What is the product of the reaction C₂ H₅ OH + 3O ₂ →
option : 7HO ₂ + CO ₂
option : 3HO ₂ + 3CO ₂
option : HO ₂ + CO ₂
option : 2HO ₂ + 2CO ₂
answer : 3HO ₂ + 2CO ₂

question : What is the product of the reaction ROH + PCl₅ →
option : HCl + POCl₃
option : RCl + HCl
answer : RCl + HCl + POCl₃
option : 5RCl + HCl + 2POCl₃
option : RCl + POCl₃

question : What is the reactant of the reaction ? → RCl + HCl + POCl₃
answer : ROH + PCl₅
option : 2 ROH + PCl₅
option : ROH + 2 PCl₅
option : 2 ROH + 2 PCl₅
option : 3 ROH + PCl₅

question : Complete the reaction 3ROH + PCl₃ → 3RCl + ?
option : H PO
option : H₂ PO ₂
answer : H₃ PO ₃
option : H₄ PO ₄
option : H₅ PO ₅

question : Complete the reaction 3ROH + ? → 3RCl + H₃ PO ₃
option : PCl
option : PCl₂
answer : PCl₃
option : PCl₄
option : PCl₅

question : Complete the reaction ROH + ? → RCl + SO ₂ + HCl
option : SOCl
answer : SOCl₂
option : SOCl₃
option : SOCl₄
option : SOCl₅

question : Complete the reaction ROH + SOCl₂ → RCl + ? + ?
option : SO ₂
answer : SO ₂ + HCl

option : SO₃ +HCl
option : SO₄ +HCl
option : HCl

question : Complete the reaction ? +HCl → CH₃Cl +H₂O
answer : CH₃OH
option : CH₃ CH₂OH
option : CH₃ CH₃OH
option : CH₃ CH₂
option : CH₂ CH₂OH

question : Complete the reaction CH₃OH +HCl → ? +?
option : CH₃Cl
option : CH₃CH₂Cl
answer : CH₃Cl +H₂O
option : CH₃CH₂Cl +H₂O
option : No reaction