

CHEMISTRY

BOOKS - TARGET CHEMISTRY (HINGLISH)

ALKANES

Classical Thinking

1. Hydrocarbons are the simplest organic compounds containing the elements .

A. Carbon and oxygen

B. carbon and hydrogen

C. hydrogen and nitrogen

D. Hydrogen and oxygen

Answer: B



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2. The alkanes C_1 to C_4 are the constituents of ____.

A. LPG (Liquefied petroleum gas)

B. CNG (compressed natural gas)

C. LNG (Liquefied natural gas)

D. all of these

Answer: D



3. is one of the components of mangoes .
A. Hexane
B. Cyclopentane
C. Octane
D. CyClohexane
Answer: D
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4. The hydrocanbrons containing rings of carbon atoms and
having propperties similar to that of aliphatic are called
Hydrocarbons

A. Alicyclic B. Aromatic C. unsatureated D. none of these **Answer: A Watch Video Solution** 5. Alkanes have open chain strurure and carbon atoms are linked together by ____. A. single covalent bond triple covalent bond B. triple covalent bond C. single ionic bond

D. sigma and pi bond

Answer: A



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6. The moleculat formula of butane is _____.

A. C_4H_{10}

B. C_5H_{12}

C. C_4H_8

D. C_4H_6

Answer: A



7. Structural formula of an organic compound represents
·
A. Actual attachment of variours atoms in a molecular
B. Only number of various atoms in a molecule
C. simplest ratio of number of atoms in a molecule
D. the number if isomers of compound
Answer: A
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8. In methane carbon atom formsC-H sigma bonds

A. four

Answer: D



- 10. Which of the following is CORRECT regarding propane?
 - A. It contains two carbon carbon single bonds and seven

 C-H bonds.
 - B. It contains two carbon carbon single bonds and eight C-H bonds.
 - C. It contains two carbon carbon single bonds and six C-H bonds.
 - D. It contains two carbon carbon single bonds and six C-H bonds.

Answer: B



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11. $-\overset{\vdash}{C}H$ group in alkanes is called ____. Group .

A. carbene

B. methylene

C. isomethine

D. methine

Answer: D



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12. The straight chian are called alkanes
A. branched
B. chain
C. normal
D. ring
Answer: C
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13. The minimum number of carbon atoms necessary for alkanes to form a branched structure is
A. 4

B. 6
C. 3
D. 9
Answer: A
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14. In isoalkanes , one of the carbon atom is attached to
other carbon atom (s) .
A. one
B. two
C. three
D. four

Answer: C



15. The alkanes in which there are two single carbon branches on the second carbon atom of the parent chain are called alkanes.

A. iso

B. neo

C. closed

D. ring

Answer: B



16. carbon atom is the one which is directly attached to				
two other carbon atoms .				
A. Secondary				
B. Tetiary				
C. Primary				
D. Quaternary				
Answer: A				
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17. Isomerism is the phenmenon in which two or more				
organic compounds have				

- A Same molecular formula but different structural formula
- B. Same structural formula but different molecular formula
- C. same general formula, but different structural formula
- D. same empirical formula, same structure

Answer: A



- 18. which of the following is the CORECT statement?
 - A. Isomers have same physical and chemical properties.
 - B. isomers have same molecular formula

- C. Isomical have same physical but different chemical properties
- D. Isomers have different physical but same chemical properties .

Answer: B



- **19.** Which among the following is the NCORRECT pairing of alkanes with its corresponsing number of isomers?
 - A. Butane -2- isomers
 - B. Pentane -3 isomers
 - C. Hexane -5 isomers

D. Heptane -8 isomers

Answer: D



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20. Isomers which can be interconverted through rotation around a single bond are

A. conformers

B. metamers

C. enantiomers

D. tautomers

Answer: A



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21. The energy required to rotate ethane molecule about the carbon bond is called ___ energy .

- A. potential
- B. Kinetic
- C. torsional
- D. Ionisation potential

Answer: C



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22. Which of the following statement is CORRECT?

- A. At any instant ,99 % of ethane molecules have staggered and only about 1% have eclipsed conformation .
- B. At any instant ,96% of ethane molecules have staggered and only about 4% have eclipsed condormation .
- C. At any instant , 90% of ethane molecules have staggered and only about 10 % have eclipsed consformation .
- D. At any instant . 95% of ethane molecules have staggered and only about 5% have eclipsed conformation .

Answer: A



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23. In eclipsed conformation, the torsional angle of ethane is

- A. 60°
- $B.\,180^{\circ}$
- $\mathsf{C.0}^{\circ}$
- D. 120°

Answer: C



24. Which of the following is propane?

A. CH_3CH_3

 $\mathsf{B.}\,CH_3CH_2CH_2CH_3$

C. $CH_3CH_2CH_3$

D. CH_4

Answer: C



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25. Which of the following is n-hexane?

A. $H_3C-CH_2-CH_2-CH_2-CH_3$

B. $H_3C - CH_2 - CH_2 - CH_2 - CH_2 - CH_3$

C.
$$H_3C-\mathop{C}\limits_{|CH_3}H-CH_3$$

D.
$$H_3C-CH_2-CH_2-CH_3$$

Answer: B



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26. Which of the following skeletal formulae represents -2-

Methylpentane?

A.
$$CH_3 - \overset{CH_3}{\overset{|}{C}}H - CH_2 - CH_3$$

B.
$$CH_3-CH_2-\mathop{C}\limits_{CH_3}H-CH_2-CH_3$$

$$C.\,H_3C-egin{pmatrix} CH_3 & & & & \ & | & & \ & | & & \ C.\,H_3C-CH_3 & & \ & | & \ & CH_3 & & \ \end{pmatrix}$$

D.
$$H_3C-\stackrel{CH_3}{C}H-CH_2-CH_2-CH_3$$

Answer: D



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27. IUPAC name of the following compound is ___.

$$H_3C-egin{pmatrix} CH_3\ dots\ CH_3\ CH_3 \end{pmatrix}$$

- A. 1,2 Dimethylpropane
- B. 2,2-Dimethylpropane
- C. 2,3,-Dimethylpropane
- D. 2,2-Dimethylbutane

Answer: B



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28. The IUPAC name of isobutane is _____.

- A. 2-Methylbutane
- B. Butane
- C. 2- Methylpropane
- D. 2,2-Dimethylpropane

Answer: C



29.
$$CH_3-C\equiv CH+CH+2H_2 \xrightarrow{ ext{Rancy Ni}} A$$

product 'A' in the given reaction is ____.

- A. propene
- B. Propane
- C. ethane
- D. butane

Answer: B



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30. The reaction in which there is removal of carbon dioxide from carboxylic acid is called _____.

A. dehydrogenation B. dehalogenation C. dehydrohalogentaion D. decarboxylation **Answer: D Watch Video Solution 31.** Alkyl halides on with the Zn-Cu couple and alcohol, give corresponding alkanes. A. Oxidation B. reduction C. hydrolysis

D. halogenation

Answer: B



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32. Alkyl halides on reduction with the Zn-Cu couple and alcohol, give corresponding alkanes. The order of reactivity of alkyl halides the reaction is ______.

- A. R-ClgtR-BrgtR-I
- B. R-BrgtR-ClgtR-I
- C. R-ClgtR-IgtR-Br
- D. R-IgtR-BrgtR-Cl

Answer: D

33. In Wurtz reaction the reagent used is

A. barium

B. aluminimum

C. sodium

D. iron

Answer: C



 $CH_3-CH_2-Br+2Na+Br-CH_2-CH_3 \stackrel{ ext{dry ether}}{\longrightarrow} A+B$

A and B are _____ respectively

A. n-butane and sodium bromide

B. n-pentane and sodium bromide

C. n-propane and sodium bromide

D. ethane and sodium bromide

Answer: A



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35. Which of the following CORRECTLY represents the increasinf order of melting point of the compounds?

A.
$$C_4 H_{10} > C_5 H_{12} > C_3 H_8 > C_6 H_{14}$$

B.
$$C_4 H_{10} < C_5 H_{12} < C_3 H_8 < C_6 H_{14}$$

C.
$$C_3H_8 < C_4H_{10} < C_5H_{12} < C_6H_{14}$$

D.
$$C_3H_8 > C_4H_{10} > C_5H_{12} > C_6H_{14}$$

Answer: C



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36. The hydrocarbon which is a liquid at room temperature is:

A. butane

B. Propane

C. decane

D. ethane

Answer: C



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37. Alkanes mainly exhibit _____ reaction .

- A. Substitution
- B. elimination
- C. addition
- D. rearrangement

Answer: A



A. Iodination
B. Bromination
C. Fluorination
D. Chlorination
Answer: C Watch Video Solution
39. Methane reacts with excess of chlorine in diffused sunlight to give the final product as
A. Carbon tetrachloride

38. Which of the following reaction of alkanes is explosive?

- B. chloroform
- C. methylene dichloride
- D. methyl chloride

Answer: A



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40. Reactivity of hydrogen atoms attached to different carbon atoms in alkane has the order:

- A. $2^{\circ} > 3^{\circ} > 1^{\circ}$
- B. $1^{\circ} > 2^{\circ} > 3^{\circ}$
- C. $3^{\circ} > 2^{\circ} > 1^{\circ}$
- D. $3^{\circ} < 1^{\circ} < 2^{\circ}$

Answer: C



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41. Nitration of alkanes involves replacement of one hydrogen atom by ____ group .

A. Amine

B. azo

C. nitro

D. cyanide

Answer: C



A. chlorination
B. Bromination
C. nitration
D. combustion
Answer: C
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43. The nitration of higher alkanes involves substitution as
well as
A. C-H bond fissions

42. Methane does NOT undergo _____.

B. C-C bond fusions C. C-H bond fusions D. all of these Answer: A **Watch Video Solution** 44. The process in which higher hydrocarbons are broken down into lower hydrocarbons by controlled pyrolysis is called ___. A. hydroysis B. cracking C. combustion

D. reduction

Answer: B



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45. When alkanes having more than five carbon atoms get cyclised to benzene and its homologues then the reaction is called .

- A. hydrogenation
- B. aromatization
- C. reforming
- D. both (B) and (C)

Answer: D

46. The dehydrog	enation of	n- Hexane	in the	presence	of a
catalyst gives					

- A. hexane and hydrogen
- B. pentene and hydrogen
- C. benzene and hydrogen
- D. hexyne and hydrogen



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47. The combustion of alkanes is a /an reaction .

A. exothermic B. endothermic C. aromatization D. all of these **Answer: A Watch Video Solution 48.** Alkanes ranging from _____ are used as lubricants, A. C_5-C_{10} B. $C_{10}-C_{15}$ $C. C_{17} - C_{20}$ D. $C_{21} - C_{30}$



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49. Incomplete combustion of alkanes in limited supply of air produces _____.

A. carbon black

B. lamp black

C. paraffin

D. alkenes

Answer: A



50.	is	used	for	the	manı	ufacture	of	priting	ink.

- A. Carbon black
- B. paraffin wax
- C. Lamp black
- D. Liquid alkanes

Answer: A



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51. In the reaction

$$2CH_3Br + Na \stackrel{ ext{ether}}{\longrightarrow} A \stackrel{conc.}{\underset{HNO_3}{\longrightarrow}} B, A ext{ and } B$$
 are _____

respectively.

- A. methane , nitromethane
- B. ethane , nitroethane
- C. nitromethane, methane
- D. nitroethane, ethane

Answer: B



- **52.** Which of the following alkanes can be represented by only one structural formula ?
 - A. propane
 - B. Butane
 - C. pentane

D. Hexane

Answer: A



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53. 2,3-dimethylpentane

 CH_3

Answer: D



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54.
$$C_2H_5I+2[H] \xrightarrow{Zn-Cu\,/\,\mathrm{alcohol}} X+HI.$$
 the product X is

A. ethane

B. propane

C. hexane

D. butane

Answer: A



- A. 8
- B. 6
- C. 4
- D. 10

Answer: A



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A. $CH_3(CH_2)_7CH_3$

57. The condensed formula for n- Nonane is _____.

- B. $CH_3(CH_2)_6CH_3$
- $\mathsf{C.}\,CH_3(CH_2)_5CH_3$
- D. $CH_3(CH_2)_2CH_3$

Answer: A



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58. _____ are saturated aliphatic hydrocarbons .

- A. Alkenes
- B. Alkanes
- C. Alkynes
- D. Alkyl groups

Answer: B



Critical Thinking

1. The molecular formula of the alkane with 17 carbon atoms

is _____

A. $C_{17}H_{36}$

 $\operatorname{B.}C_{17}H_{34}$

C. $C_{17}H_{38}$

D. $C_{17}H_{32}$

Answer: A



2. The value of 'n' in a saturated hydrocarbon having the molecular formula $C_n H_{10}$ is _____.

A. 2

B. 4

C. 5

D. 6

Answer: B



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3. In alkanes , the bond angle is ____.

A. $109^{\circ}28'$

- B. 109°
- $\mathsf{C.}\,120^\circ$
- D. 180°

Answer: A



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4. Which of the following CORRECTLY represents the structure of $(CH_3)_2CHCH_2CH(CH_3)CH_2CH_3$?

 CH_3

Answer: A

 CH_3



5. which of the following CORRECTLY reprsents bond -line formula of - n- butane ?



В. 🔜

C. 📝

D. 📝



6. The number of primary , secondary , tertiary and quanternary carbon atoms in the following alkane are ______respectively

$$CH_{3} - \overset{CH_{3}}{\overset{|}{C}}H - CH - CH_{2} - \overset{C}{C}H_{2} - \overset{C}{\overset{|}{C}} - CH_{3} \ \overset{|}{\overset{|}{C}H_{3}}$$

- A. 5,3,1 and 1
- B. 3,3,2 and 0
- C. 6,1,0 and 0
- D. 6,1,2 and 1

Answer: A



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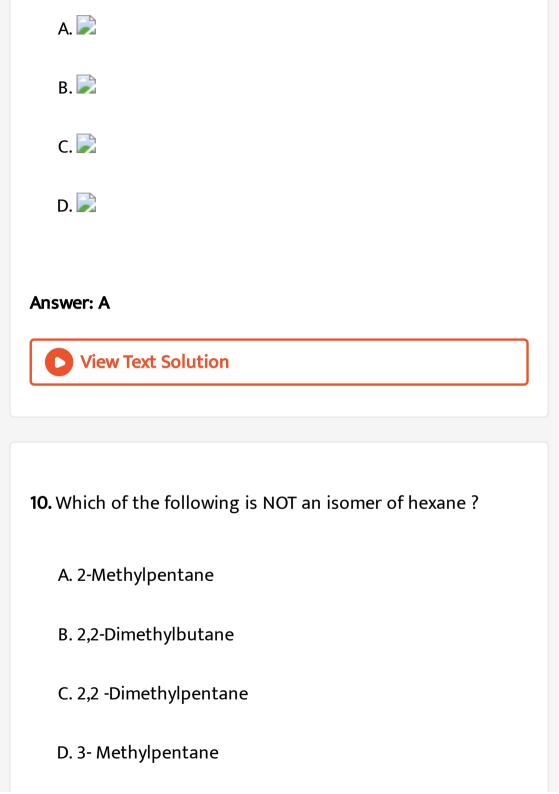
- **7.** In case of alkanes , the number of isomers ____ as the length of carbon chain increases.
 - A. decreses
 - B. increases
 - C. first increases then decreases
 - D. remains the same

Answer: B



A. chain isomers
B. geometrical isomers
C. position isomers
D. tautomers
Answer: A
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9. Which of the following CORRECTLY represents chain isomers considering that all the valencies of carbon atoms are satisfied with hydrogen ?

8. n-Butane and isobutane are examples of ____.





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11. IUPAC name of the following compound is ____.

$$CH_{3} - CH_{3} \ | \ CH_{3} - CH_{2} - CH_{3} \ | \ CH_{2} \ | \ CH_{2} \ | \ CH_{3}$$

- A. 3- Ethy-3-methylpentane
- B. 2-Ethyl-2-methylpentane
- C. 3,3-Dimethylpentane
- D. 3,3- Dimethylbuatne

Answer: C



12. Following compound repesents ____.

$$CH_{3} \ | \ CH_{2} - CH_{2} - CH_{2} - CH_{3} - CH_{2} - CH_{3}$$

- A. 4-propylheptane
- B. 4-Ethylocatane
- C. 4-propylocatne
- D. 4-propydecane

Answer: C



13. In which of the following alkanes , parent chain contains 7 corbon atoms ?

A.
$$CH_3{(CH_2)}_2$$
 $CH_2{(CH_3)}_2$ CH_3 $CH_2{(CH_3)}_2$

B.
$$CH_3(CH_2)_9CH_3$$

C.
$$(CH_3)_2 CH(CH_2)_{14} CH_3$$

D.
$$CH_3(CH_2)_6CH(CH_3)_2$$

Answer: A



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14. The IUPAC name of neohexane is _____

A. 2-Methylpentnae

- B. 2,3 -Dimethylhexane
- C. 2,2-Dimethylbutane
- D. 2,3 -Dimethylbutane



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15. The IUPAC name of following compound is _____.

$$CH_3 - CH_2 - CH - CH_2 - CH_3$$

$$CH_3 - CH_2 - CH - CH_2 - CH_3$$

- A. 3,4 -Diethylhexane
- B. 3,3-Diethylpropane
- C. 3,4 -Dimethylhextane

D. 3- (1- Ethylpropy I) pentane

Answer: A



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16. Give the IUPAC name of following compound .

$$CH_{3} \qquad CH_{3} \ | \ H_{3}C-C-CH_{2}-C-CH_{3} \ | \ CH_{2}-CH_{3}CH_{3}$$

- A. 2,2,4,4-Tetramethylhexane
- B. 2,4-Tetramethylhexane
- C. 2,2,4-Tetramethylhexane
- D. 4,4-Tetramethylhexane

Answer: A



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17. The reaction

$$C_n H_{2n-2} + 2 H_2 \stackrel{ ext{Rancey Ni}}{ o} C_n H_{2n+2}$$
 is called ____ reaction

- A. Sabatier and sanderson
- B. Kolbe's
- C. Friedel Craft 's
- D. Cannizzaro 's

Answer: A



18. Identify the reactant in the given reaction _____

$$+H_2 \xrightarrow[Detla]{{
m Raney \ Ni}} CH_3 - CH_3$$

- A. ethane
- B. ethene
- C. propyne
- D. propene

Answer:



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19. Which of the following salt on treatment with soda lime gives propane ?

- A. Sodium acetate
- B. Sodium ethanote
- C. Sodium propanoate
- D. Sodium butanoate

Answer: D



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20. To prepare a pure sample of n-hexane, using sodium metal as one reactant, the other reactant or reactants will be:

- A. CH_3CH_2 and $CH_3CH_2CH_2CH_2Br$
- $\mathsf{B.}\,CH_3Br\,\text{ and }\,CH_3CH_2CH_2CH_2CH_2Br$

C. $CH_3CH_2CH_2Br$

D. CH_3CH_2Br and $CH_3CH_2CH_2Br$

Answer: C



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21. which of the following has maximum boiling point?



В. 📝

C. 📝

D. 🔀

Answer: A

22.	The	most	volatile	alkanes	is	

A. n-pentane

B. isopentane

C. neopentne

D. none of these

Answer: C



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23. Which catalyst is used in the bromination of alkanes?

A. Cr_2O_3

- B. Raney Ni
- C. $AlBr_3$
- D. CaO



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- **24.** Arrange the following steps according to the order followed in the free radical mechansm for halogenation of alkanes?
- I. Chain initiatinf step
- II. Chain termination step
- III. Chain propagation step

A. III,I,II

B. I,II,III
C. I,III,II
D. III,II,I
Answer: C
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25. The nature of products formed in thermal decomposition
of alkanes depends on
A. Structure of alkanes
B. pressure
C. Pressure or absence of catayst
D. all of these

Answer: D



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26. The complete oxisation of alkanes is known as _____.

- A. combustion
- B. halogenation
- C. hydrogenation
- D. pyrolsis

Answer: A



27. Paraffin wax is a/ an
A. ester
B. alcohol
C. unsatureated hydrocarbon
D. saturated hydrocarbon
Answer: D Watch Video Solution
28. Constituents of paraffin wax contain solid alkanes
ranging from
A. $C_{11} \mathrm{to} C_{20}$

- B. $C_{21} \mathrm{to} C_{30}$
- C. $C_5 \mathrm{to} C_{15}$
- D. all of these

Answer: B



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29. which of the following is CORRECT?

- A. The infinite number of intermediate conformations between staggered and eclipse conformations are called gauche conformation .
- B. In neoalkanes, isopropyl group is present at one end of the normal chain of carbon atoms

- C. Methane is a non-polar molecules.
- D. Raney nickel is an alloy cotaining equal amount of nickel and platinum.



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30. The given compound is

$$H_{3}C-CH_{2}-C \atop | CH_{3} \atop | CH_{3} - C \atop | CH_{3} - CH_{3} \atop | CH_{3} - CH_{3}$$

- A. 3, 4, 4, 5 Tetramethylheptnae
- B. 4,4,5- Trimethylheptane
- C. 3,3,4,5 -Tetramethylheptane

D. 3,4,5 -Trimethylheptane

Answer: A



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31. Normal hydrocarbon contains _____.

- A. Only primary carbon atoms with no branching
- B. either only primary or both primary and secondary carbon atoms with no branching
- C. either only primary or both primary and secondary carbon atoms with branching
- D. only primary carbon atom with branching

Answer: B



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32. Both methane and ethane can be prepared in one step from _____.

A.
$$CH_3I$$

B.
$$C_2H_5I$$

C.
$$CH_3OH$$

D.
$$C_2H_5OH$$

Answer: A



33. A mixture of propene and methane is obtained by the cracking of

A. But -1- ene

B. But -2-ene

C. n-butane

D. propyne

Answer: C



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Competitive Thinking

1. Gasoline has composition

A.
$$C_8-C_{12}$$

B.
$$C_2-C_5$$

$$\mathsf{C.}\,C_6-C_8$$

D. none of these

Answer: C



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2. which represents an alkane?

A.
$$C_5H_8$$

B.
$$C_8H_6$$

$$\mathsf{C.}\,C_9H_{10}$$

D.
$$C_7H_{16}$$

Answer: D



- **3.** The correct statement the comparison of staggered and eclipsed conformations of ethan is:
 - A. The eclipsed conformation of ethane is more stable than staggered conformation even though the eclipsed conformation has torsional strain
 - B. The staggered conformation of ethane is more stable than eclipsed conformation because staggered conformation has no torsional strain

- C. The staggerend conformation of ethane is less stable than eclipsed conformation of ethane is less stable than eclipsed conformation because staggered conformation has torsional strain
- D. The eclipsed conformation of ethane is more stable than staggered conformation, because eclipsed conformation has no torsional strain

Answer: B



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4. With respect to the conformers of ethane, which of the following statements is true ?

- A. Bond angle reamains same but bond length changes .
- B. Bond angle changes but bond length reamains same .
- C. Both bond angle and bond length changes
- D. Both bond angle and bond length ramains same.

Answer: D



- 5. Which one of the following contain isopropyl group
 - A. 2,2,3,3-Tetramethylpentane
 - B. 2-Methylpentane
 - C. 2,2,3-Trimethylpentane
 - D. 3,3- Dimethylpentane

Answer: B



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- **6.** Propane is obtained from propene, by which of the following methods?
 - A. Wurtz reaction
 - B. Dehydrogenation
 - C. Frankland reaction
 - D. Catalytic hydrogenation

Answer: D



·
A. Propane
B. propene
C. ehtane
D. ethene
Answer: C
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8. In Wurtz reaction the reagent used is

A. Na

7. Dry distillation of sodium propanoate with soda lime gives

- B. Na/Liquid $NH_{
 m 3}$
- C. Na/ dry ether
- D. Na/dry Alcohol

Answer: C



- **9.** Which one of the following cannot be prepared by Wurtz reaction ?
 - A. CH_4
 - B. C_2H_6
 - C. C_3H_8
 - D. C_4H_{10}

Answer: A



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10. When ethylbromide and propyl bromide are allowed to reacts with sodium in ether, they form

- A. one alkane
- B. two alkanes
- C. four alkanes
- D. three alkanes

Answer: D



A. Wurtz's reaction								
B. decarboxylation								
C. gydrogenation reaction								
D. all of these								
Answer: B								
Watch Video Solution								
12. Which of the following compounds has the highest								
boiling point ?								
A. n-Hexane								

11. Methane can be prepared by:

C. 2,2- Dimethylpropane D. 2-Methylbutane **Answer: A Watch Video Solution** 13. Photochemical chlorination is initiated by a process of A. pyrolysis B. substituton C. cracking D. homolysis

B. n-pentane

Answer: D



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14. Which of the following is NOT formed by the reaction of Cl_2 on CH_4 in sunlight ?

A.
$$CHCl_3$$

B.
$$CH_3Cl$$

$$C. CH_3CH_3$$

D.
$$CH_3CH_2CH_3$$

Answer: D



A. Fluorine						
B. Chlorine						
C. Bromine						
D. lodine						
Answer: A						
Watch Video Solution						
16. Product obtained by nitraction of propane is						
A. nitropropane						
B. nitromethane						

15. Which of the following reaction of alkanes is explosive?

Answer: A



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18. Conversion of hexane into benzene involes the _____ reaction.

- A. hydration
- B. hydrolysis
- C. hydrogenation
- D. dehydrogenation

Answer: D



19. Carbon black is carbon in a very finely divided state. It is used to make paints and printers ink. It is obtained by the thermal decomposition of

- A. acetylene
- B. benzene
- C. carbon tetrachloride
- D. methane

Answer: D



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20. Which of the following has maximum boiling point?

- A. Isooctane
- B. n-Octane
- C. 2,2,3,3-Tetramethylbutane
- D. n-Butane

Answer: B



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- 21. Which statement is NOT TRUE concerning alkanes?
 - A. Large number of alkanes are soluble in water.
 - B. All alkanes have a lower density than water
 - C. At room termperature some alkanes are liquids, some

are solids and some are gases

D. All alkanes burn

Answer: A



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22. A mixture of ethyl iodide and n-propyl iodide is subjected to Wurtz reaction. The hydrocarbon that will not be formed is

A. n-butane

B. n-propane

C. n-pentane

D. n-hexane

Answer: B



23.	Anhydrous	sodium	acetate	on	heating	with	soda	lime
give	es							

A. acetic acid

B. methane

C. Calcium acetate

D. ethane

Answer: B



24. The reaction

$$CH_2=CH_2+H_2 \xrightarrow[250-300^{\circ}C]{ ext{Ni}} CH_3-CH_3 ext{ is Called } ___.$$

- A. Wurtz's reaction
- B. Kolbe's reaction
- C. Sabatier and sanderson's reaction
- D. Carbylamine reaction

Answer: C



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25. The fourth higher homologue of ethane is _____.

A. butane

B. pentane C. hexane D. heptane **Answer: C Watch Video Solution** Answers To Evaluation Test 1. The order of apperance of the following with rising temperature during the refining of crude oil is . A. CNG, gasoline, diesel B. Diesel, gasoline, CNG

- C. Gasoline, diesel, CNG
- D. Gasoline ,CNG ,diesel

Answer: A



- 2. Which of the following CORRECTLY represents molecular formula of an alkane whose molecules weight was found to be 170?
 - A. $C_{10}H_{22}$
 - B. $C_{12}H_{26}$
 - C. $C_{14}H_{30}$
 - D. $C_{16}H_{34}$

Answer: B



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3. What is the fmolecular formula of the alkane, the 5.6 litres of which wieght 11 g at STP?

A. CH_4

B. C_4H_{10}

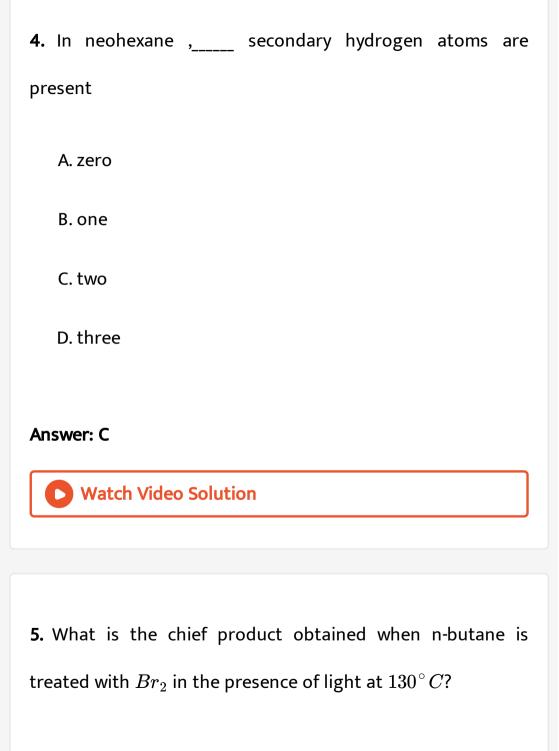
 $\mathsf{C}.\,C_3H_8$

D. C_2H_6

Answer: C



View Text Solution



A.
$$CH_3-CH_2-\mathop{C}\limits_{CH_3}H-Br$$

B.
$$CH_3-\mathop{C}\limits_{|CH_3\atop CH_3}H-CH_2-Br$$

C.
$$CH_3-\stackrel{|}{\stackrel{C}{C}}_{CH_3}-Br$$

D.
$$CH_3-CH_2-CH_2-CH_2-Br$$

Answer: A

