

CHEMISTRY

BOOKS - SURA CHEMISTRY (TAMIL ENGLISH)

CARBON AND ITS COMPOUNDS

Textbook Evaluation Choose The Correct Answer

1. The molecular formula of an open chain organic compound is C_3H_6 . The class of the

compound is

A. alkane

B. alkene

C. alkyne

D. alcohol

Answer: B



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2. The IUPAC name of an organic compound is 3-Methyl butan-1-ol. What type compound it is ?

- A. Aldehyde
- B. Carboxylic acid
- C. Ketone
- D. Alcohol

Answer: D



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3. The secondary suffix used in IUPAC nomenclature of an aldehyde is _____

A. *-ol*

B. *-oic acid*

C. *-al*

D. *-one*

Answer: C



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4. Which of the following pairs can be the successive members of a homologous series ?



Answer: A



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5. $C_2H_5OH + 3O_2 \rightarrow 2CO_2 + 3H_2O$ is a

- A. Reduction of ethanol
- B. Combustion of ethanol
- C. Oxidation of ethanoic acid
- D. Oxidation of ethanal

Answer: B



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6. Rectified spirit is an aqueous solution which contains about _____ of ethanol .

A. 95.5 %

B. 75.5 %

C. 55.5 %

D. 45.5 %

Answer: A



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7. Which of the following are used as anaesthetics ?

A. Carboxylic acids

B. Ethers

C. Esters

D. Aldehydes

Answer: B



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8. TFM in soaps represents _____ content in soap .

A. mineral

B. vitamin

C. fatty acid

D. carbohydrate .

Answer: C



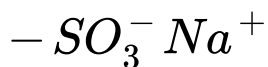
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9. Which of the following statement is wrong about detergents ?

A. It is a sodium salt of long chain fatty acids

B. It is sodium salts of sulphonic acids

C. The ionic part in a detergent is



D. It is effective even in hard water .

Answer: A



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Textbook Evaluation Fill In The Blanks

1. An atom or a group of atoms which is responsible for chemical characteristics of an organic compound is called _____ .



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2. The general molecular formula of alkyene is _____ .



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3. In IUPAC name, the carbon skeleton of a compound is represented by _____ (root /word/prefix/suffix) .



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4. (Saturated / Unsaturated) _____ compounds decolourize bromine water .



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5. 100% pure ethanol is called _____ .



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6. Ethanoic acid turns _____ litmus to _____



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7. The alkaline hydrolysis of fatty acids is termed as _____ .



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8. Biodegradable detergents are made of _____
(branched / straight) chain hydrocarbons .

 [View Text Solution](#)

Textbook Evaluation Match The Following

1. Match the following :



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Textbook Evaluation Assertion And Reason

1. Assertion : Detergents are more effective cleansing agents than soaps in hard water .

Reason : Calcium and magnesium salts of detergents are water soluble .

A. A and R are correct , R explain the A .

B. A is correct , R is wrong .

C. A is wrong , R is correct

D. A and R are correct , R doesn't explain A .

Answer: A



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2. Assertion : Alkanes are saturated hydrocarbons.

Reason : Hydrocarbons consist of covalent bonds .

A. A and R are correct , R explain the A .

B. A is correct , R is wrong .

C. A is wrong , R is correct

D. A and R are correct , R doesn't explain A .

Answer: D



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Textbook Evaluation Short Answer Question

1. Name the simplest ketone and give the structural formula .



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2. Classify the following compounds based on the patterns of carbon chain and give their structural formula : (i) Propane (ii) Benzene (iii) Cyclobutane (iv) Furan



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3. How is ethanoic acid prepared from ethanol ? Give the chemical equation .



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4. How do detergents cause water pollutions ?

Suggest remedial measures to prevent this pollution .



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5. Differentiate soaps and detergents .



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Textbook Evaluation Long Answer Question

1. What is called homologous series ? Give any three of its characteristics .



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2. Arrive at , systematically , the IUPAC name of the compound : $CH_3 - CH_2 - CH_2 - OH$.



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3. How is ethanol manufactured from sugarcane ?



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4. Give the balanced chemical equation of the following reaction

Neutralization of NaOH with ethanoic acid .



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5. Give the balanced chemical equation of the following reaction

Evolution of carbon dioxide by the action of ethanoic acid with $NaHCO_3$.



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6. Give the balanced chemical equation of the following reaction

Oxidation of ethanol by acidified potassium dichromate.





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7. Give the balanced chemical equation of the following reaction

Combustion of ethanol .



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8. Explain the mechanism of cleansing action of soaps and detergents.



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Textbook Evaluation Hot Questions

1. The molecular formula of an alcohol is $C_4H_{10}O$.

The locant number of its -OH group is 2.

Draw its structural formula.



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2. The molecular formula of an alcohol is $C_4H_{10}O$.

The locant number of its -OH group is 2 .

Give its IUPAC name .



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3. The molecular formula of an alcohol is



The locant number of its -OH group is 2 .

Is it saturated or unsaturated ?



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4. An organic compound 'A' is widely used as a preservative and has the molecular formula $C_2H_4O_2$. This compound reacts with ethanol to form a sweet smelling compound 'B' ?

Identify the compound 'A'.



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5. An organic compound 'A' is widely used as a preservative and has the molecular formula $C_2H_4O_2$. This compound reacts with ethanol

to form a sweet smelling compound 'B' ?

Write the chemical equation for its reaction with ethanol to form compound 'B'.



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6. An organic compound 'A' is widely used as a preservative and has the molecular formula $C_2H_4O_2$. This compound reacts with ethanol to form a sweet smelling compound 'B' ?

Name the process .



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Additional Question Answer Choose The Correct Answer

1. Which among the following is /are the properties of organic compounds ?

(i) are covalent in nature

(ii) exhibit isomerism

(iii) have low melting and boiling point

A. (i) and (ii)

B. (i) and (iii)

C. (i) , (ii) and (iii)

D. only (iii)

Answer: C



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2. Cyclobutane is an example of _____ compounds.

A. a cyclic

B. cyclic

C. aromatic

D. alicyclic

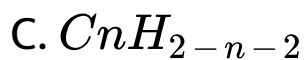
Answer: D



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3. General molecular formula of alkynes is





Answer: C



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4. Ethene is an _____

A. alkane

B. alkene

C. alkyne

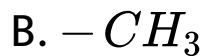
D. aromatic hydrocarbon

Answer: B



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5. Methylene group is _____

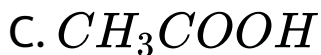
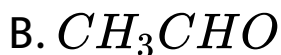
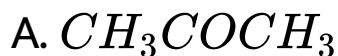


Answer: C



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6. Identify the ketone among the following



Answer: A



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7. The organic compound contains 2 carbon atoms, the root word according IUPAC is _____

A. Meth-

B. Eth-

C. Prop-

D. But-

Answer: B



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8. According to IUPAC rules, the secondary suffix used to represent carboxylic acids is _____

A. al

B. ol

C. ate

D. oic

Answer: D



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9. The enzyme present in yeast is / are

A. invertase

B. zymase

C. both (a) and (b)

D. neither (a) nor (b)

Answer: C



10. Rectified spirit contains _____

- A. 95.5% of ethanol and 4.5% of water
- B. 100% pure alcohol
- C. 4.5% of ethanol and 95.5% of water
- D. 50% of ethanol and 50% of water

Answer: A



11. Alcohols + Acids $\xrightarrow{\text{conc. } H_2SO_4}$ Esters . This reaction is _____.

- A. Ester hydrolysis
- B. Esterification
- C. Dehydrogenation
- D. Oxidation

Answer: B



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12. When ethanol reacts with acidified $K_2Cr_2O_7$, the orange color of $K_2Cr_2O_7$ changes to _____

A. yellow

B. red

C. purple

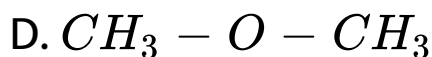
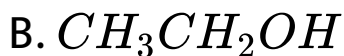
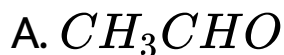
D. green

Answer: D



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13. Chemical formula of acetaldehyde is



Answer: A



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14. Ethanol is used as _____

A. a preservative for biological specimen

B. an antifreeze

C. an antiseptic

D. all the above

Answer: D



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15. Ethanoic acid turns _____

A. red litmus blue

B. blue litmus red

C. red litmus green

D. blue litmus green

Answer: B



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16. Hard water contains salts of _____

A. Ca and Mg

B. Fe and Ca

C. Cu and Fe

D. Cu and Ca

Answer: A



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17. Which of the following is formed when soap water acts on clothes to remove dirt or grease ?

- A. acetic acid
- B. Micelle
- C. Ethyl alcohol
- D. all the above

Answer: B



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18. Identify the product formed when ethanol reacts with sodium .

- A. Sodium acetate
- B. Sodium ethanate
- C. Sodium ethoxide
- D. Sodium formate .

Answer: C



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19. Which of the unique feature (s) of carbon enables it to form a large number of compounds ?

A. catenation

B. covalency

C. tetra valency

D. both (a) and (c)

Answer: D



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20. All the members of homologous series have the same _____

A. molecular formula

B. physical Properties

C. general formula

D. all the above

Answer: C



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21. What is the IUPAC name of



A. 1- Pentanone

B. 2-Pentanone

C. 3-Pentanone

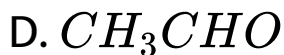
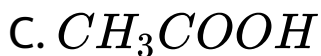
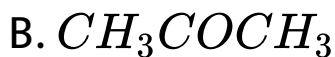
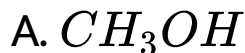
D. 4-Pentanone

Answer: C



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22. Which one of the following changes blue litmus red ?



Answer: C



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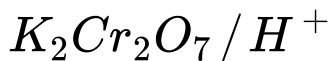
23. Ethyl alcohol is mainly manufactured by

A. destructive distillation of wood

B. fermentation of molasses

C. Dehydrogenation

D. Oxidation of ethane in the presence of



Answer: B



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24. The organic acid present in Vinegar is _____ acid .

A. methanoic

B. ethanoic

C. Propanoic

D. Butanoic

Answer: B



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25. The sodium salt of long chain fatty acid which helps in cleaning of clothes is _____

A. vinegar

B. detergent

C. soap

D. both (b) and (c)

Answer: C



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Additional Question Answer Fill In The Blanks

1. Benzene is an example of _____ compound .



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2. Alkanes are represented by the general molecular formula _____.



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3. The simplest alkane is _____.



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4. The chemical properties of organic compounds are determined by their _____ groups .



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5. Members of a homologous series have similar _____ properties .



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6. The principal source of butyric acid is



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7. Ethanol is manufactured by the

fermentation of _____ .



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8. Esters have a _____ odour .



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9. The common name of ethanoic acid is _____ acid.



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10. Ethanoic acid has a _____ taste .



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11. The gas formed during the decarboxylation of sodium salt of ethanoic acid is _____



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12. _____ is used as an anaesthetic .



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13. All the cooling oils and lipids contain

_____.



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14. Sodium salts of fatty acids are known as

_____.



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15. The cleaning action of soap is reduced by

_____ .



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16. _____ and _____ are used to keep
detergents dry .



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17. Total fatty matter (TFM) is used to assess the _____ of soap .



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18. Expansion of IUPAC is _____



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19. Expansion of TFM is _____



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20. Soaps are sodium or potassium salt of some long chain _____



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21. Detergents are sodium salts of _____



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22. IUPAC name of the organic compound consist of _____, _____ and _____.



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23. The carbon atoms in organic compounds are linked through _____ bonds .



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24. Ethane is an example of a/an _____ carbon compound .



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25. The organic compounds that are composed of only carbon and hydrogen atoms are called _____



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26. Alkanes are hydrocarbons contain only

_____.



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27. Hydrocarbons which contain one or more

C=C bonds are called _____.



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28. Hydrocarbons containing carbon to _____ are called alkynes .



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29. Acetylene is the simplest _____



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30. The general formula of alkanes is _____



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31. Organic compound have a _____ structure .



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32. Organic compounds are _____ reactive than inorganic compounds .



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33. _____ are saturated hydrocarbons .



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34. Alkenes are alkynes are _____
hydrocarbons .



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35. The chemical properties of organic
compound depends on its _____ group .



[View Text Solution](#)

36. Most organic compounds form _____ bonds .



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37. Organic compound have _____ melting point than inorganic compounds .



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38. Acyclic compounds are otherwise called as



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39. If one or more double or triple bonds exists between carbon atoms is called



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40. If the chain contains only carbon atoms in cyclic compounds, then its is said to be _____



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41. Cyclic compounds are also called _____



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42. _____ is the chemistry of catenated carbon compounds .



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43. If all the carbon atoms in the chain are connected by _____, the compound is called as saturated .



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44. Organic compounds in which the chain of carbon atom is _____ are called cyclic compounds.



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45. _____ are further divided into alicyclic and aromatic compounds .



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46. _____ contain one or more carbocyclic rings .



[Watch Video Solution](#)

47. _____ contain one or more benzene rings .



[Watch Video Solution](#)

48. Methane is the simplest _____



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49. The general formula of alkenes is _____



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50. Lower hydrocarbons are _____ at room temperature .



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51. The boiling point of hydrocarbons increases with an increase number of _____ atoms .



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52. _____ is a group or a class of organic compounds having same general formula and similar chemical properties .



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53. All members of a homologous series contain the _____ elements and functional group .



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54. Homologous series are represented by a general formula _____.



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55. Chemical properties of the members of a _____ are similar.



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56. Homologous series are differ by a _____ group .



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57. The _____ acid was initially obtained by distillation of 'red ants' .



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58. A _____ is the basic unit , which described the carbon selection .



[Watch Video Solution](#)

59. The prefix used for IUPAC substituent -F is



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60. The prefix used for IUPAC substituent -Cl is



Watch Video Solution

61. The prefix used for IUPAC substituent -Br is



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62. The prefix used for IUPAC substituent -I is



Watch Video Solution

63. The prefix used for IUPAC substituent

– NH_2 is _____



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64. The prefix used for IUPAC substituent

– CH_2CH_3 is _____



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65. The _____ suffix comes after the root word .



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66. The _____ describes the functional group of the compound .



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67. Ethanol is commonly known as _____



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68. All alcoholic beverages and some cough syrups contain _____.



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69. The molecular formula of ethanol is _____



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70. _____ is a dark coloured syrupy liquid left after the crystallization of sugar from the

concentrated sugarcane juice .



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71. If the nitrogen content of the molasses is poor, it may be fortified by the addition of _____ or _____.



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72. Ethanol reacts with _____ metal to form sodium ethoxide and hydrogen.



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73. _____ is used in medical wipes , as na
antispetic .



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74. Ethanol is used as an _____ in
automobile radiators.



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75. Methylated spirit is a mixture of 95% of _____ and 5% of _____



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76. Rectified spirit is a mixture of _____ of ethanol and _____ of water .



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77. Power alcohol is a mixture of _____ and ethanol .



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78. When ethanol mixed with pyridine , the compound is said to be _____.



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79. The molecular formula of _____ is



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80. On cooling , pure ethanoic acid is _____ to

form ice like flakes .



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81. When a sodium salt of ethanoic acid is heated with _____, methane gas is formed.



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82. Ethanoic acid is _____ in taste .



Watch Video Solution

83. The fermented liquid during the formation of ethanol is called _____.



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84. Fermentation is conversion of complex organic molecules into simpler molecules by the action of _____.



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85. Curding of milk is an example of _____.



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86. _____ of ethanol is $78^{\circ}C$



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87. When ethanol is heated with con H_2SO_4 at 443 K, it lose a _____ molecule .



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88. Ethanoic acid is also known as glacial





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89. _____ process is the oldest method in the manufacturing of soap .



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90. _____ which prevents the corrosion and ensures that the detergent does not damage the washing machine .



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91. ____ of a soap molecule is hydrophilic in a nature .



[Watch Video Solution](#)

92. _____ of a soap molecule hydrophobic in a nature .



[Watch Video Solution](#)

93. When a soap a detergent is dissolved in water , the molecules join together as clusters called _____



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94. _____ can be used in both hard and soft water .



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95. _____ can clean more effectively in hard water in a nature.



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96. Organic compounds exhibit the phenomenon of _____ in which a single molecular formula represents several organic compounds .



[Watch Video Solution](#)

97. The compounds in which the carbon atoms are linked in a linear pattern to form the chain are known as _____.



[Watch Video Solution](#)

98. The chemical properties of organic compounds are determined by certain groups called _____.



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99. In the IUPAC name of Butanone , the secondary suffix is _____



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100. Molasses contain about _____ of sucrose

.



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101. Sugar is converted into glucose and fructose by the enzyme _____.



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102. Glucose or Fructose (Sucrose) is converted into ethanol by the enzyme _____.



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103. _____ is used as an anti-freeze in automobiles .



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104. Mixture of 3 parts of NaOH and 1 part of CaO is _____.



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105. The compound used for coagulating rubber from latex is _____



Watch Video Solution

106. Hard water contains _____





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107. The substance added to prevent the caking of the detergent powder is _____



[Watch Video Solution](#)

108. Oxygen bleaches such as _____

enable the removal of certain stains from the cloth .



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109. _____ acid is used in the manufacture of plastic .



[Watch Video Solution](#)

110. _____ is a cleaning agent that is composed of one or more salts of fatty acids .



[Watch Video Solution](#)

111. _____ is a chemical compound or a mixture of chemical compounds , which is used as a cleaning agent .



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112. _____ and _____ are two major raw material of soap .



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113. Alkali used for the preparation of soap is

_____.



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114. Potassium based soap creates a more water soluble product than a _____ based soap.



Watch Video Solution

115. _____ soaps are used for washing pruposes

.



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116. _____ soaps are used for cleansing the
body.



[Watch Video Solution](#)

117. _____ do not leave any soap scum on the tub or clothes .



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118. _____ have a linear hydrocarbon chain , which is biodegradable .



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119. _____ are active emulsifiers of motor grease .



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120. Biodegradable detergent have _____ which can be easily degraded by bacteria .



Watch Video Solution

121. Carbon compounds are known as

_____.



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122. Carbon compounds contain _____.



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[Additional](#) [Question](#) [Answer](#) [Match](#) [The](#)
[Following](#)

1. 



[View Text Solution](#)

2. 



[View Text Solution](#)

3. 



[View Text Solution](#)

4. 

 [View Text Solution](#)

5. 

 [View Text Solution](#)

6. 

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Additional Question Answer State Whether The Following Statement Are True Of False Correct The False Statement

1. Organic compounds are readily soluble in water .



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2. Alkenes are represented by the general molecular formula as C_nH_{2n} .



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3. Esters are represented as R-CHO .



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4. Members of a homologous series contain same functional group .



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5. Red ants contain formic acid .





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6. Ethanol is reduced to ethanoic acid when treated with acidified $K_2Cr_2O_7$.



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7. Ethanol is used for coagulation rubber from latex.



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8. Consumption of ethanol affects our central nervous system .



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9. Methanol is formaldehyde .



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10. Ethanoic acid is a strong acid .



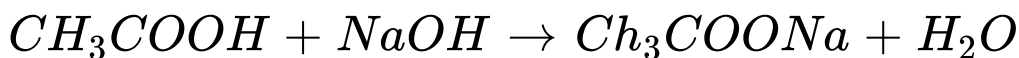
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11. Detergents are sodium salts of sulphonic acids .



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12.



. The above reaction is an example of neutralisation reaction .



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13. Successive members of homologous series differ by a methyl group ($-CH_3$).



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14. The IUPAC name of CH_3CHO is ethanal.



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[Additional Question Answer Assertion And Reason](#)

1. Assertion : There are more than 5 million hydrocarbons.

Reason : Carbon has unique properties such as catenation , tetra valency and multiple bonding .

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion .

B. Both Assertion and Reason are true but Reason is not the correct explanation of

Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: A



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2. Assertion : Acetic acid turns blue litmus red

Reason : It is a weak acid .

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion .

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: B



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3. Assertion : Detergents are unbranched hydrocarbons .

Reason : It can be used in hard water and as softeners .

A. Both Assertion and Reason are true and

Reason is correct explanation of

Assertion .

B. Both Assertion and Reason are true but

Reason is not the correct explanation of

Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: D



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4. Assertion : The boiling point of n-butane is greater than that of methane .

Reason : Boiling points of hydrocarbons

increases with increase in number of carbon atoms .

A. Both Assertion and Reason are true and Reason is correct explanation of Assertion .

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: A



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5. Assertion : Functional group is responsible for the characteristic of the compounds .

Reason : The chemical properties of organic compounds are determined by functional group.

A. Both Assertion and Reason are true and

Reason is correct explanation of

Assertion .

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: B



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6. Assertion : All living organism are made of carbon atom. Carbon chemistry is also called as living chemistry . Give reason .

Reason : Carbon atom form the building blocks of living organism. These carbon atoms in combination with other atoms decide life on earth. Hence carbon chemistry is also called as living chemistry.

A. Both Assertion and Reason are true and

Reason is correct explanation of

Assertion .

B. Both Assertion and Reason are true but Reason is not the correct explanation of Assertion .

C. Assertion is true but Reason is false .

D. Assertion is false but Reason is true .

Answer: A



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**Additional Question Answer Analogy Type
Questions Identify The First Words And Their**

Relationship And Suggest A Suitable Word For The Fourth Blank

1. Aldehyde : R-CHO :: Ketones : _____



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2. Ethanol : Burning taste :: Ethanoic acid :



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3. Alkane : C_nH_{2n+2} :: Alkyne: _____



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4. HCOOH : Formic acid :: CH_3CH_2COOH

: _____



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5. Ethanol : 351.3 K :: Ethanoic acid : _____



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6. Soap : vegetable oils :: Detergent : _____



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7. Polar end : hydrophilic :: Non-polar end :



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8. Propane : saturated compound :: Benzene :



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9. Straight hydrocarbon : biodegradable ::

Branched hydrocarbon : -----



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Additional Question Answer Very Short Answers

1. When ethanol vapour is passed through bromine water . Why does no change occur ?

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2. What is micelles ?

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3. Why ordinary soap is not suitable for using with hard water ?





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4. What are hydrocarbons?



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5. What is rectified spirit ?



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6. What are functional groups ? Give examples

.



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7. What is absolute alcohol ?



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8. Name the organic compounds





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9. Name the organic compounds



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10. What is molasses ?



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11. What is methylated spirit ?



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12. What is power alcohol ?



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13. Write the uses of ethanol .



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14. How will you bring about the conversion of sucrose into ethanol ?



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15. Define fermentation .



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16. How is nitrogen content of molasses fortified ?



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17. How will you convert ethanol to ethane ?



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18. What is glacial acetic acid ?



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19. Write the uses of ethanoic acid .



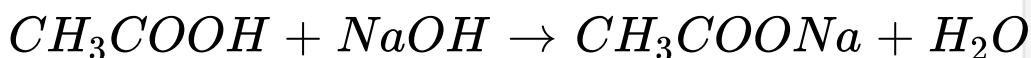
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20. Explain the reaction of carboxylic acids on metals .



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21. Acetic acid + Sodium hydroxide to Sodium ethanoate + water .



Name the above reaction .





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22. What do you mean by decarboxylation ?



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23. Name the decarboxylating agent .



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24. What is soda lime ?





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25. (i) Formaldehydes is used as a disinfectant
(ii) Raw material for synthetic materials.



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26. Give any two applications of ketones in our daily life .



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27. Write a short note on soft soaps .



[Watch Video Solution](#)

28. What is saponification ?



[Watch Video Solution](#)

29. What is meant by hard water ?



[Watch Video Solution](#)

30. Why soap does not lather in hard water ?

 [View Text Solution](#)

31. How are detergents prepared ?

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32. What are Bio degradable and Non-biodegradable detergents ?

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33. What does TFM refer to ?



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34. Write down the common and IUPAC names of the following . (i) C_2H_5OH (ii)



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35. Identify the compounds using the clues given below.

This is a dark coloured syrupy liquid containing 30% of sucrose .



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36. Identify the compounds using the clues given below.

During manufacture of ethanol this is added as food for yeast .





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37. Identify the compounds using the clues given below.

This enzyme converts sucrose into glucose and fructose .



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38. Identify the compounds using the clues given below.

This compound contains 95.5% ethanol and 4.5%



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39. Read each description given below and say whether it fits for ethanol or ethanoic acid.

It is a clear liquid with a burning taste .



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40. Read each description given below and say whether it fits for ethanol or ethanoic acid.

It is used to preserve biological specimens in laboratories .



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41. Read each description given below and say whether it fits for ethanol or ethanoic acid.

It is used to preserve food and fruit juices .



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42. Read each description given below and say whether it fits for ethanol or ethanoic acid.

On cooling it is frozen to form ice flakes which look like a glacier .



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43. C_nH_{2n+2} is the general formula of a homologous series of hydrocarbons.

Is this series saturated or unsaturated .



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44. C_nH_{2n+2} is the general formula of a homologous series of hydrocarbons.

Name the series described above . Give the formula and name of the member with two carbon atoms .



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45. C_nH_{2n+2} is the general formula of a homologous series of hydrocarbons.

Draw the structural formula of the first member of this series .



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46. C_nH_{2n+2} is the general formula of a homologous series of hydrocarbons.

Write the formula of n-butane and n-pentane .



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47. Ethanol is heated with excess concentrated H_2SO_4 at 443 K .

Name the reaction that occurs and explain it .



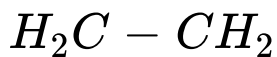
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48. Ethanol is heated with excess concentrated H_2SO_4 at 443 K .

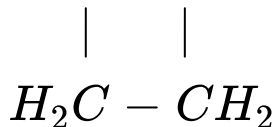
What is the product formed ?



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49.



Name the above compound and classify it



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50. Define heterocyclic compounds . Give an example .



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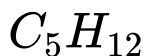
51. Give the molecular formula and structural formula of acetic acid .



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Additional Question Answer Short Answers

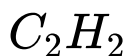
1. Identify saturated and unsaturated compound containing double bond and triple bond .





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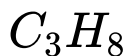
2. Identify saturated and unsaturated compound containing double bond and triple bond .



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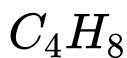
3. Identify saturated and unsaturated compound containing double bond and triple

bond .



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4. Identify saturated and unsaturated compound containing double bond and triple bond .



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5. Define esterification . Give an example .



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6. An organic compound of molecule formula $C_2H_6O(A)$ which is used as an antifreeze when oxidised with $K_2Cr_2O_7 / H^+$ gives compound (B) which is used for making Vinegar . Identify compound (A) and (B) . Write the reactions involved .



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7. Give a test to identify the presence of alcohol .



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8. What happens when ethanol is passed over Cu at 573K ?



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9. Complete the following reaction .



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10. Complete the following reaction .



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11. How to identify saturated and unsaturated compounds ?



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12. Write the characteristics of hydrocarbons .



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13. Statement :Acetic acid reacts with baking soda with a brisk effervescence.

Answer the question with respect to the above statement .

Write the chemical formula of acetic acid .



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14. Statement :Acetic acid reacts with baking soda with a brisk effervescence.

Answer the question with respect to the above statement .

What is the IUPAC name of CH_3COOH ?



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15. Statement :Acetic acid reacts with baking soda with a brisk effervescence.

Answer the question with respect to the above statement .

What is baking soda ?



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16. Statement :Acetic acid reacts with baking soda with a brisk effervescence.

Answer the question with respect to the above

statement .

Name the gas that evolves with brisk effervescence during the above reaction .



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17. Statement :Acetic acid reacts with baking soda with a brisk effervescence.

Answer the question with respect to the above statement .

Write the equation for the above chemical change .



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Additional Question Answer Long Answers

1. Write the characteristics of organic compounds.



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2. How will you classify organic compound based on the pattern of carbon chain ?



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3. How will you classify hydrocarbons ?

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4. What are the advantages of detergents over soaps ?

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1. A to F are the structural formulae of some organic compounds:



Give the letters which represent the same family .



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2. A to F are the structural formulae of some organic compounds:



Give the letters which do not represent hydrocarbons.



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3. A to F are the structural formulae of some organic compounds:



Flow can 'C' be converted into A ?



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4. An organic compound A of molecular formula C_2H_4 on reduction gives another compound B of molecular formula C_2H_6 . B on reaction with chlorine in the presence of sunlight gives C of molecular formula C_2H_5Cl .

Name the compounds A,B and C



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5. An organic compound A of molecular formula C_2H_4 on reduction gives another compound B of molecular formula C_2H_6 . B on reaction with chlorine in the presence of sunlight gives C of molecular formula C_2H_5Cl .

Write chemical equation for the conversion of A to B and name the type of reaction.



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6. An organic compound 'A' of molecular formula C_2H_6O on oxidation with dilute alkaline $KMnO_4$ solution gives an acid 'B' with the same number of carbon atoms . Compound 'A' is often used for sterilization of skin by doctors . Name the compound . Write the chemical equation involved in the formation of 'B' from 'A'.



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