



India's Number 1 Education App

CHEMISTRY

FOR IIT JEE ASPIRANTS OF CLASS 11 FOR

CHEMISTRY

GENERAL ORGANIC CHEMISTRY

WE 1

1. Write the hybridised state of carbon in the following compounds and shapes of each of each

of the molecules.



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WE 2

1. What is the type of hybridization of each carbon in the following compounds?



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1. How many sigma and pi bonds are present in each of the following molecules?



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- 1. Organic compounds can be formed by**
- A. Plants only
 - B. Animals only
 - C. Plants and Animals
 - D. Plants, animal and can be synthesized in laboratory

Answer: D



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2. The first carbon compound prepared from its elements is

- A. Urea
- B. Acetic acid
- C. Methane
- D. Benzene

Answer: B



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3. Generally organic compounds are

- A. Amorphous
- B. Complexes
- C. Covalent
- D. Electrovalent

Answer: C



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4. Marsh gas mainly contains:

A. C_2H_4

B. C_2H_4

C. CH_4

D. C_2H_6

Answer: C



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5. Energy required for the excitation of carbon atom is

A. 501.6 KJ/mol

B. 827.0 KJ/mol

C. 341.0 KJ/mol

D. 610.0 KJ/mol

Answer: A



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6. Hybridisation at 2nd carbon in

$CH_2 = CH - CH_3$ is

A. sp

B. sp^2

C. sp^3

D. sp^3d

Answer: B



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7. Which of the following has minimum C - H bond length

A. C_2H_4

B. C_2H_2

C. C_2H_6

D. C_6H_6

Answer: C



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8. The cylindrical shape of alkynes is due to

A. Three σ C - C bonds

B. Three π C - C bonds

C. Two σ C - C and two π C - C bonds

D. One σ and two π C - C bonds

Answer: D



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9. Which of the following statement is not correct?

A. Double bond is shorter than a single bond

B. Sigma (σ) bond is weaker than Pi (π) bond

C. Double bond is stronger than hydrogen

bond

D. Covalent bond is stronger than hydrogen bond

Answer: B



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10. Toluene has

A. 6σ – and 3π – bond

B. 9σ – and 3π – bond

C. 9σ – and 6π – bond

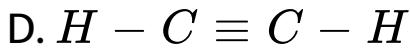
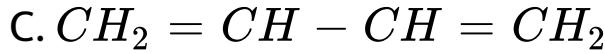
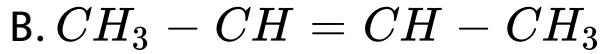
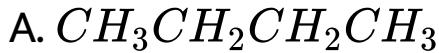
D. 15σ – and 3π – bond

Answer: D



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11. Which of the following compounds contains more than one kind of hybridized carbons?



Answer: B



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12. Carbon atoms in $C_2(CN)_4$ are :

- A. sp and sp^2 hybridised
- B. sp^2 hybridised
- C. sp hybridised
- D. sp, sp^2 and sp^3 hybridised

Answer: A



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13. The ratio of the number of sp , sp^2 , and sp^3 orbitals in the compound is



A. 1:1:1

B. 2:2:1

C. 3:2:1

D. 3:3:4

Answer: D



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14. Which is an alicyclic compound

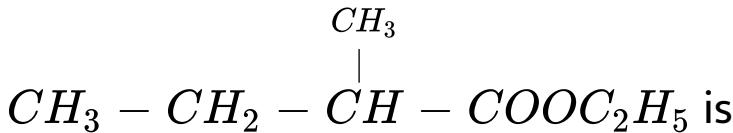
- A. Benzene
- B. cyclohexane
- C. pyridine
- D. pyrrole

Answer: B



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15. The IUPAC name of the compound



- A. 2 – Ethyl – ethylacetate
- B. Ethyl – 3 – methyl butanoate
- C. Ethyl - 2 - methyl butanoate
- D. 2 – methyl butanoic acid

Answer: C



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16. Functional group present in amides is

A. $-COOH$

B. $-NH_2$

C. $-CONH_2$

D. $-COO -$

Answer: C

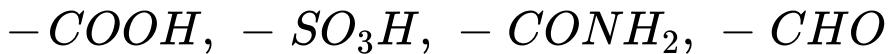


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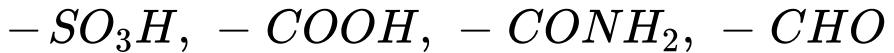
17. The correct decreasing order of priority for the functional groups of organic compounds in

the IUPAC system of nomenclature is

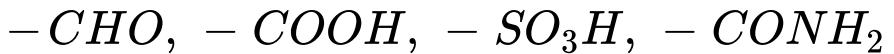
A.



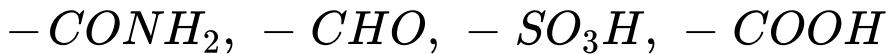
B.



C.



D.



Answer: A



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18. The functional group present in anisole is

- A. ketone
- B. aldehyde
- C. amine
- D. ether

Answer: D



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19. I.U.P.A.C name of ester is

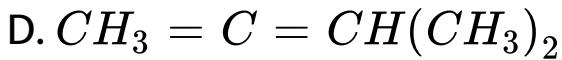
- A. Alkoxy alkane
- B. Alkyl alkanoate
- C. Alkanoyl halide
- D. Alkanoic anhydride

Answer: B



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20. 3 – methyl pent – 1, 3 – diene is

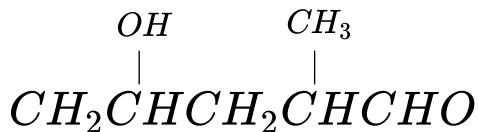


Answer: C



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21. The *IUPAC* name of



is

A. 4-hydroxy -2- methyl pentanal

B. 2-hydroxy -4- methyl pentanal

C. 4-hydroxy-2- methyl pentanol

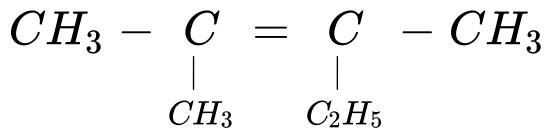
D. 2-hydroxy-4- methyl pentanol

Answer: A



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22. The correct IUPAC name



- A. 1,2 -diethyl butene
- B. 2 - ethyl -3- methyl pentene
- C. 3 , 4 - dimethyl hex -3- ene
- D. 2 , 3 - dimethyl pent -2- ene

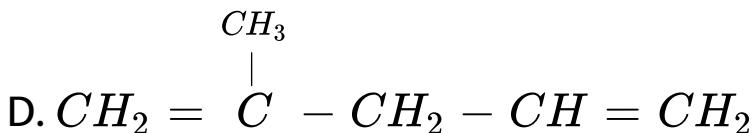
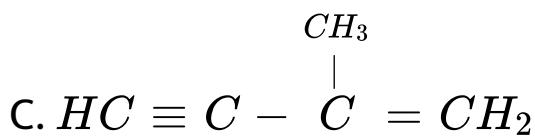
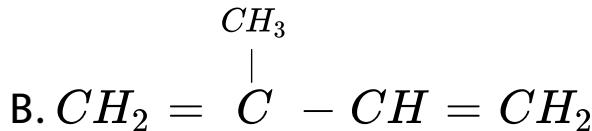
Answer: D



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23. The structure of isoprene is

- A. $CH_3 - CH = C = CH_2$

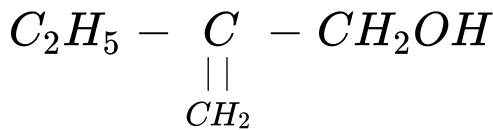


Answer: B



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24. The IUPAC name of the compound



A. 2 - Ethyl prop-2- ene-1 -ol

B. 2- Hydroxymethyl butan-1 -ol

C. 2- Methylene butan-1 -ol

D. 2- Ethyl - 3hydroxyprop-1 -ene

Answer: A



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25. IUPAC name of $HOOC - CH_2 - CHO$ is

A. Formly ethanoic acid

B. 2-Carboxyethanal

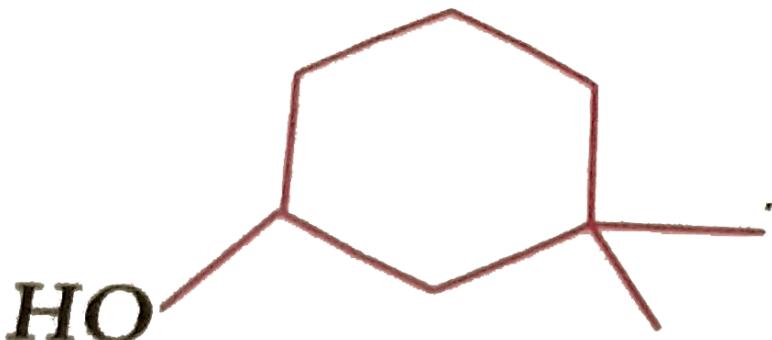
C. Prop-3-al-1-oic acid

D. Prop-1-al-3-oic acid

Answer: A



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26.

The

IUPAC name of the compound

A. 3,3-dimethyl -1- hydroxycyclohexane

B. 1,1 - dimethyl-3-cyclohexanol

C. 3,3-dimethyl-1- cyclohexanol

D. 1,1 - dimethyl -3- hydroxycyclohexane

Answer: C



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Level II C W

1. The first organic compound synthesised in the laboratory from an inorganic compound is
- A. NH_4NCO
 - B. $NH_2 - CO - NH_2$
 - C. CH_3COOH
 - D. CH_4

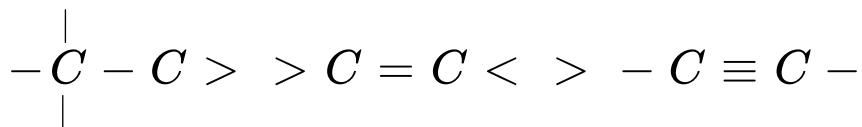
Answer: B



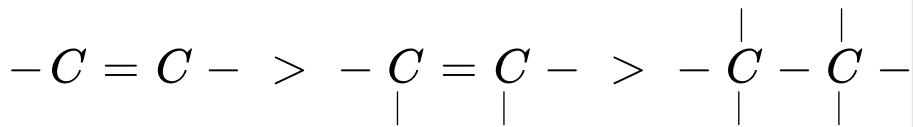
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2. Bond length order is

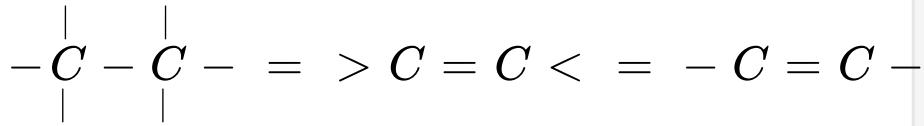
A.



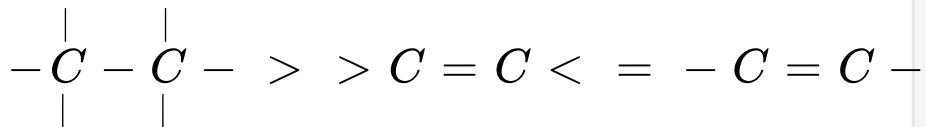
B.



C.



D.

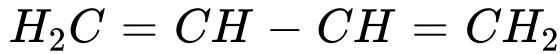


Answer: A



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3. The ratio of pure and hybrid orbitals



A. 7:12

B. 14:13

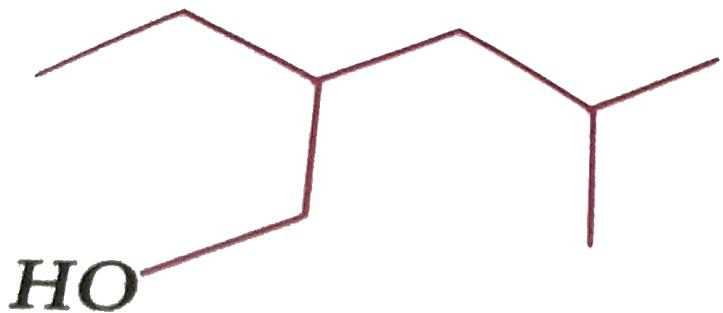
C. 12:10

D. 5:6

Answer: D

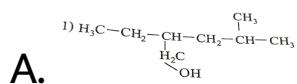


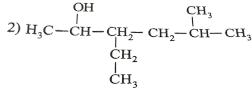
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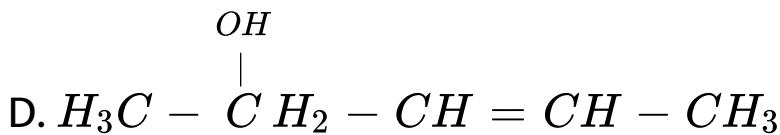
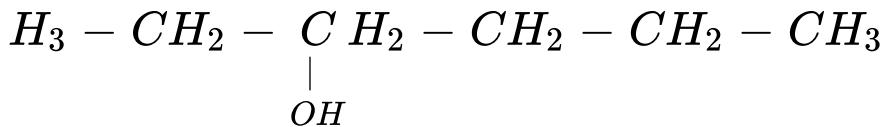
structure is





B.

C.

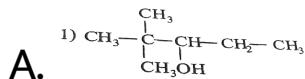


Answer: A

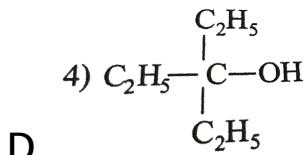
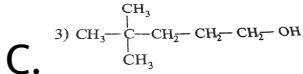
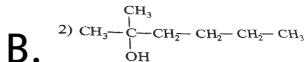


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5. Neo-heptyl alcohol is correctly represented as



A.



Answer: C



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6. Which is an alicyclic compound

A. Benzene

B. cyclo pentene

C. pyridine

D. pyrrole

Answer: B



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7. According to the huckel rule, planar and completely conjugated monocyclic polyene is aromatic if it possesses

A. $4n$ bonds

B. $4n$ atoms

C. $(4n + 2)$ atoms

D. $(4n + 2)\pi$ electrons

Answer: D



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8. The number of π electrons present in phenanthrecene

A. 10

B. 14

C. 12

D. 16

Answer: B



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9. The number of following is an aromatic compound

A. phenol

B. Naphthalene

C. pyridine

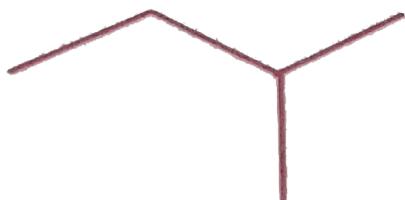
D. All

Answer: D



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10. The IUPAC name of the given compound



or



is

A. 2-methyl butane

B. 3-methyl butane

C. Pentane

D. Isopentane

Answer: A



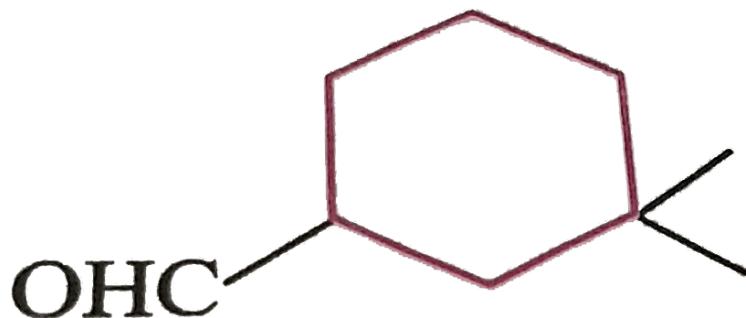
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11. I.U.P.A.C name of methyl cyanide is

- A. Cyano methane
- B. Ethanenitrile
- C. Methane nitrile
- D. Methyl-n-butyl amine

Answer: B

12. The IUPAC name of the compound



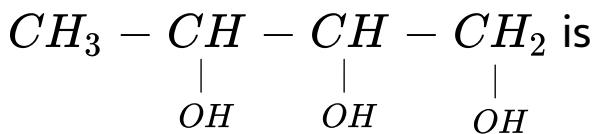
- A. 3, 3- Dimethyl cyclohexane carbaldehyde
- B. 1, 1-Dimethyl -3- hydroxy cyclohexane
- C. 3 , 3-Dimethyl -1- hydroxy cyclohexane
- D. 1, 1-Dimethyl -3-cyclohexanol

Answer: A



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13. The IUPAC name the compound

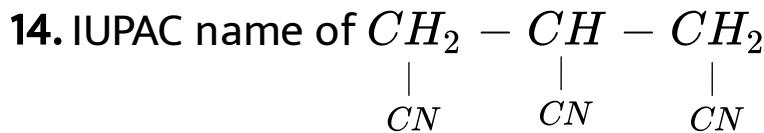


- A. Butane -2, 3, 4-triol
- B. Butane-1, 2, 3-triol
- C. Pentane -1, 2, 3-triol
- D. 2, 3- dihydroxy butanol

Answer: B



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A. 3 - cyanopentane -1, 5-dinitrile

B. Propane -1,2,3 - tri nitrile

C. 1,2,3 - tri cyano propane

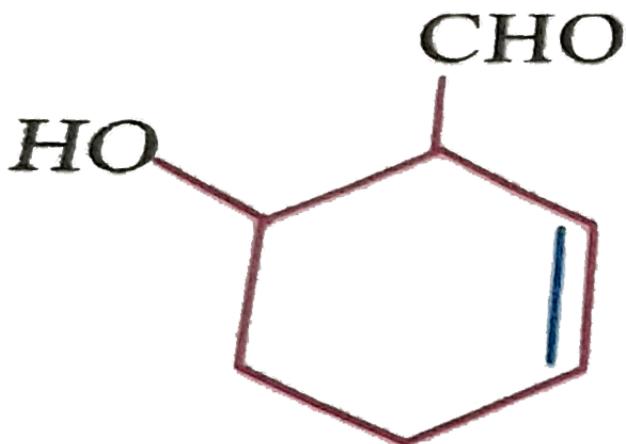
D. Propane - 1,2,3 - tricarbonitri le

Answer: D



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15. What is the IUPAC name of the following



- A. 6 - hydroxy cyclohex - 2 - ene - 1 - al
- B. 4 - hydroxy cyclohex - 1 - ene - 3 - al
- C. 2 - hydroxy cyclohex - 5 - ene carbaldehyde

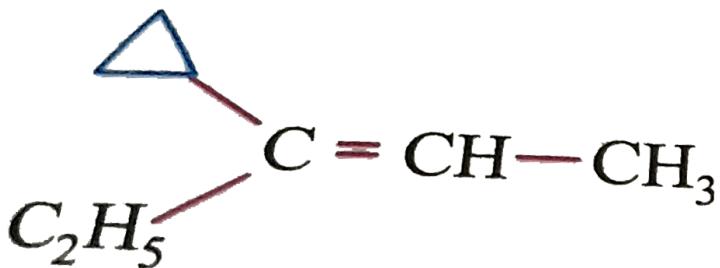
D. 1 - formyl cyclohex - 5 - enal

Answer: C



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16. The IUPAC name of



A. 3-Cyclopropyl-3-ethyl -2- propene

B. 1-Cyclopropyl-1-ethyl propene

C. 3-Cyclopropyl-2-pentene

D. (1-ethyl-1-propenyl)cyclopropane

Answer: C



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17. IUPAC name of $CH_3CH_2CH_2COCH_3$ is

A. 2-pentanone

B. Pentan-2-one

C. pentanone-2

D. all the above

Answer: D



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18. The systematic name of



A. 2-Propanoic acid

B. Isobutanoic acid

C. 2-Methylpropanoic acid

D. 2-Methylbutanoic acid

Answer: C



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Level III

1. The hybridisation of carbon atoms in $C - C$

single bond is $HC \equiv C - CH = CH_2$ is

A. $Sp^3 - Sp^3$

B. $Sp^2 - Sp^3$

C. $Sp - Sp^2$

D. $Sp^3 - Sp$

Answer: C



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2. Which of the following order regarding the size of hybrid orbital of carbon is correct?

A. $Sp > Sp^2 > Sp^3$

B. $Sp < Sp^2 < Sp^3$

C. $Sp > Sp^2 < Sp^3$

D. $Sp < Sp^2 > Sp^3$

Answer: B



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3. The correct order regarding the electronegativity of hybrid orbitals of carbon is ?

A. $Sp > Sp^2 > Sp^3$

B. $Sp < Sp^2 < Sp^3$

C. $Sp > Sp^2 < Sp^3$

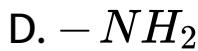
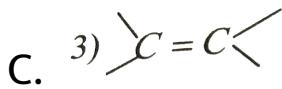
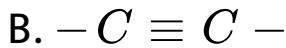
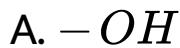
D. $Sp < Sp^2 > Sp^3$

Answer: A



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4. The least priority functional group among the following is:



Answer: B



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5. C-H and 7 C-C sigma bonds are in

A. cyclohexane

B. 3,3-dimethylphentane

C. 2,2,3-trimethylpentane

D. n-heptane

Answer: C



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6. The *IUPAC* name of vinyl acetylene is:

A. Pent - 1 - ene-4-yne

B. Pent-4-yne-1-ene

C. But-1-en-3-yne

D. But-1-yn-3-ene

Answer: C



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7. The *IUPAC* name of acrolein is:

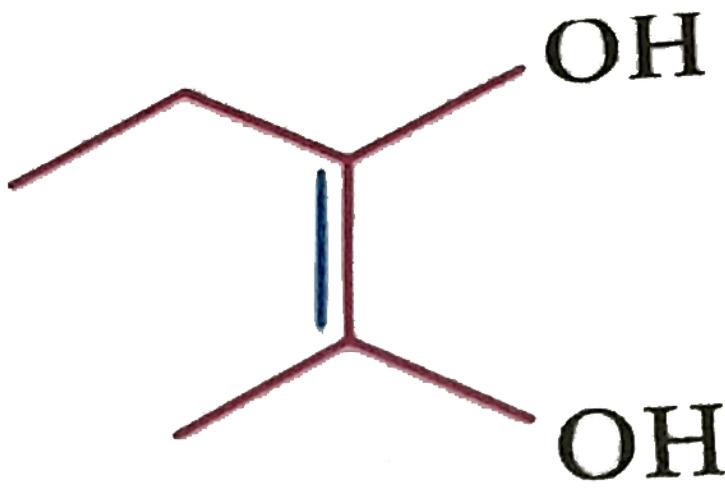
- A. But-2-enal
- B. Prop-2-enal
- C. But-3-enal
- D. 2-Methyl prop-2-enal

Answer: B



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8. The IUPAC name of



is

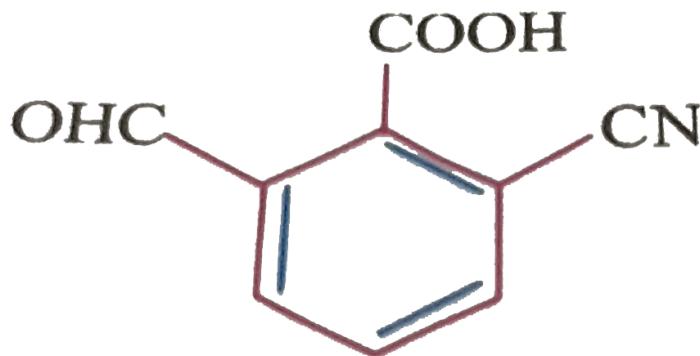
- A. but - 2 - ene - 2,3- diol
- B. pent - 2 - ene -2, 3- diol
- C. 2 - methyl but - 2 ene - 2,3 -diol
- D. hex - 2- ene -2, 3 -diol

Answer: B



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9. The IUPAC name of the given structure



- A. 3 - cyano - 2 - carboxy benzaldehyde
- B. 2 - cyano - 6 - formyl benzoic acid
- C. 6 - cyano - 2 formyl benzoic acid

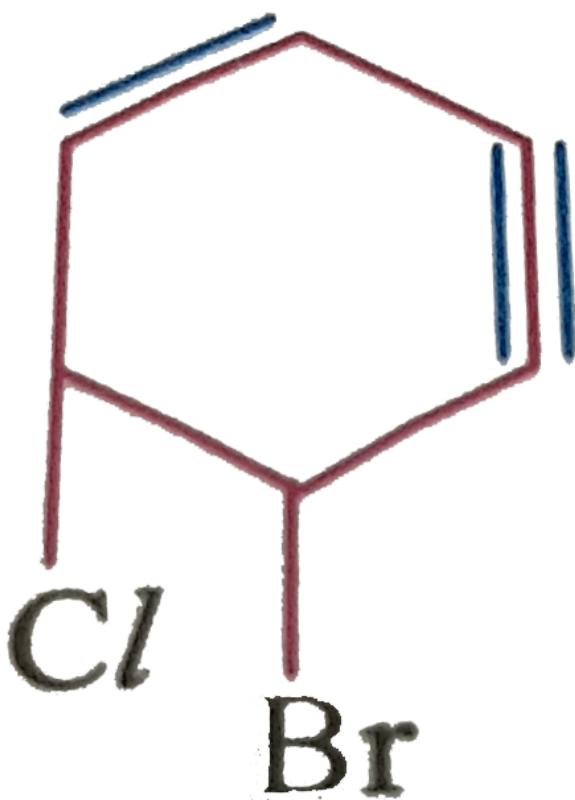
D. 2 - formyl - 6 - cyano benzoic acid

Answer: B



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10. The IUPAC names of the following pair of compound



- A. 6-Bromo-5-chlorocyclohexen-3-yne
- B. 5-Bromo-6-chloro-1-cyclohexen-3-yne
- C. 6-Bromo-5-chloro-3-cyclohexen-1-yne
- D. 4-Bromo-3-chloro-1-cyclohexan-5-yne

Answer: B

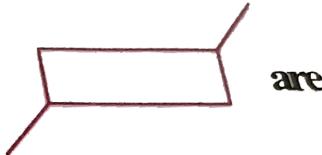


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11. The correct IUPAC name of compounds



and



are

- A. Cis-1,2 dimethyl cyclobutane and trans-1,3 dimethyl cyclo butane

- B. 2-Butene and methylpropene

- C. Trans-2-butene and cis-2-butene

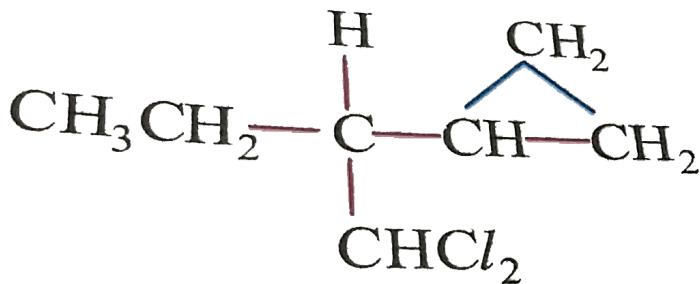
D. Methylpropene and methylpropene

Answer: A



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12. The correct IUPAC name of



A. 1-Chloro-2-butylcyclopropane

B. 1-Chloro-2-cyclopropylbutane

C. 1-Chloro-methyl-1-ethyl cyclo propane

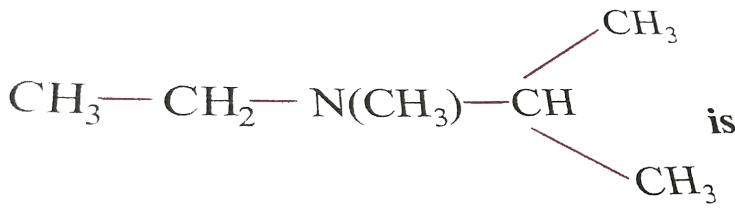
D. 3-Chloro methyl-1,2-methylenepentane

Answer: B



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13. IUPAC name of the compound



A. N-ethyl-N-methyl isopropane

B. N-ethyl-N-methyl amino propane

C. N-ethyl-N-methyl-1-amino propane

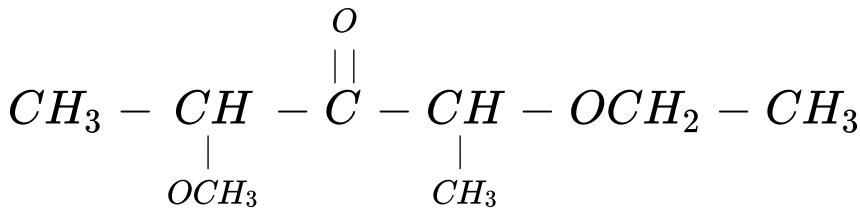
D. N-ethyl-N-methyl-2-propanamine

Answer: D



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14. IUPAC name of



A. 2-Methoxy-4-ethoxy-3-pentanone

B. 2-Ethoxy-4-methyoxy-3-pentanone

C. 2,4-Dimethoxy hexanone

D. 2-Ethoxy-3-methoxy-3-pentanone

Answer: B



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15. IUPAC name of allyl chloride

A. 1 -chloro - 1- propene

B. 1 -chloro - 2 - propene

C. 3-chloro - 2- propene

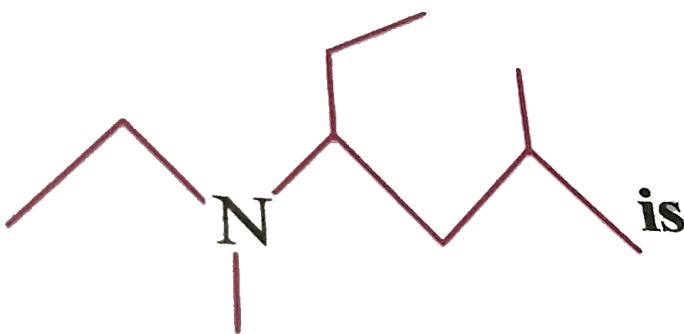
D. 3-chloro -1 propene

Answer: D



Watch Video Solution

16. The IUPAC name of



A. *N* – ethyl–*N*, *N* – dimethyl–4 –

hexanamine

B. *N,N*–diethyl–*N*–dimethyl–4–

butanamine

C. *N* – ethyl – *N* – methyl – 5 – methyl

– 3 – hexanamine

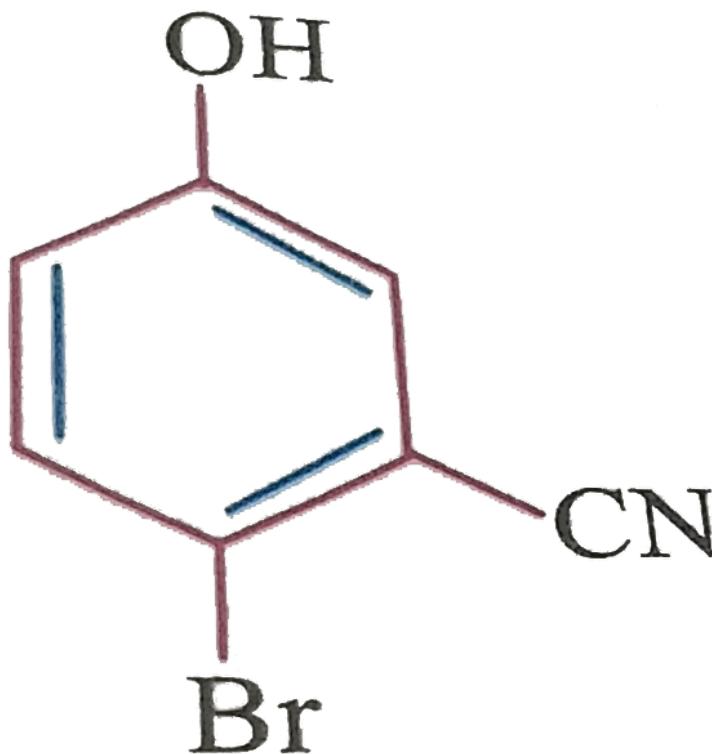
D. 3 – (ethylmethyl amino)–5 –

methylhexane

Answer: C



Watch Video Solution



17.

IUPAC name of the compound

- A. 4-bromo-3- cyano phenol
- B. 2-bromo-5-hydroxybenzonitrile

C. 2-cyano-4-hydroxy bromobenzene

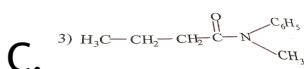
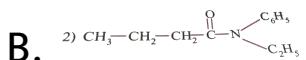
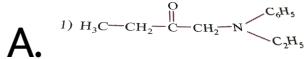
D. 6-bromo-3-hydroxy benzo nitrile

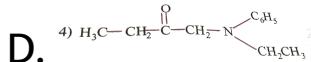
Answer: B



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18. The structure of N-Ethyl-N-phenyl-butanamide
is



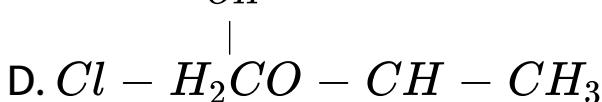
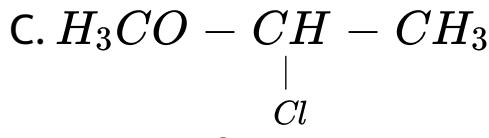
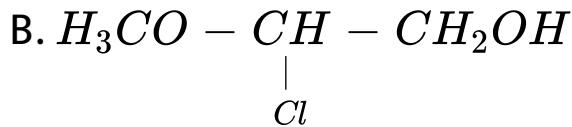


Answer: B



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19. The structure of 2-(chloromethoxy) ethanol

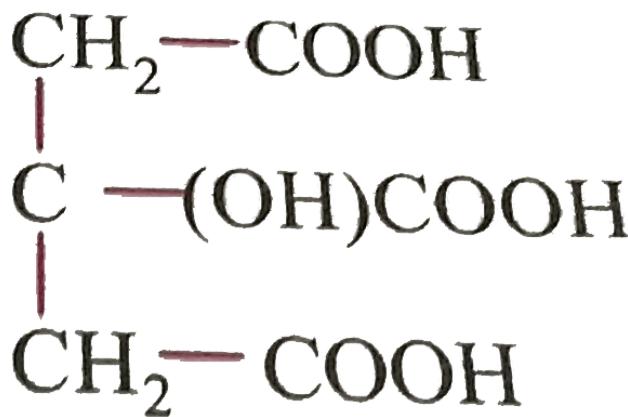


Answer: A



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20. The IUPAC name of



- A. 2-hydroxy-1,2,3-propanetricarboxylic acid
- B. 3-hydroxy-1,2,3-pentane triotic acid

C. 3-carboxy-3-hydroxy-1,5-pentandioic acid

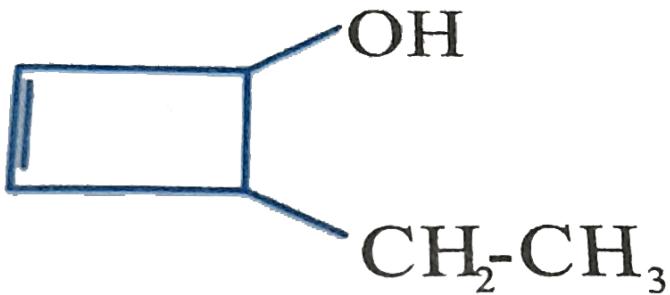
D. 1,2,3-tri carboxy-2-propanol

Answer: A



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21. The IUPAC name of the given compound is :



A. 3-Ethyl-1-cyclobuten-2-ol

B. 4-Ethyl-2-cyclobuten-1-ol

C. 2-Ethyl-3-cyclobuten-1-ol

D. 4-Ethyl-1-cyclobuten-3-ol

Answer: B



Watch Video Solution

22. 3-Phenyl propenoic acid is the IUPAC name of which of the following compound

A. Cinnamic acid

B. Mendaleic acid

C. Picric acid

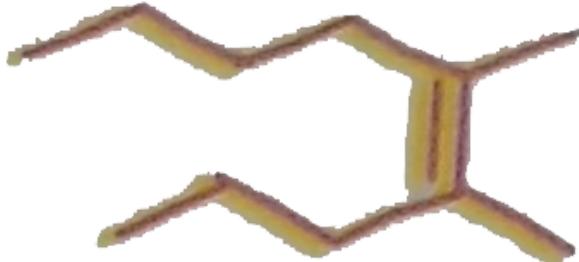
D. Citric acid

Answer: A



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23. The IUPAC name of the given compound is :



A. 4,5-Dimethyl-1-octene

B. 4,5-Dimethyl-5-octene

C. 3,4-Dimethyl-5-octene

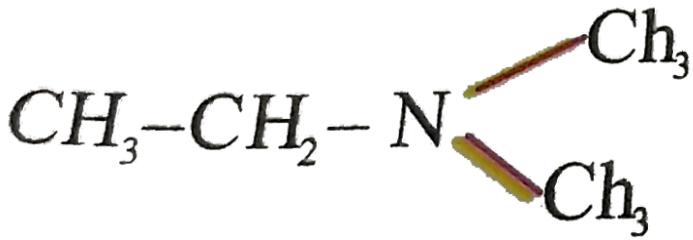
D. 2,3-Dipropyl-2-butene

Answer: A



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24. The IUPAC name of the given compound



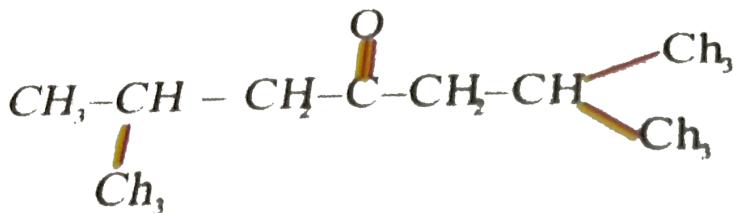
- A. N,N-Dimethylethylamine
- B. N-Ethyl-N-methyl methylamine
- C. 1-(dimethylamino) ethane
- D. 1-(Ethylmethylamino) methane

Answer: C



Watch Video Solution

25. The name of the given structure



A. 2,4-Dimethyl-3-hexanone

B. 2,6-Dimethyl-5-heptanone

C. 2,6-Dimethyl 4-hexanone

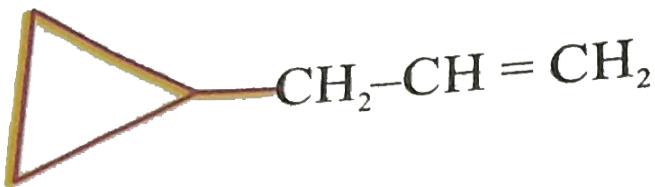
D. 2,6-Dimethyl 4heptanone

Answer: D



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26. The IUPAC name of the given compound



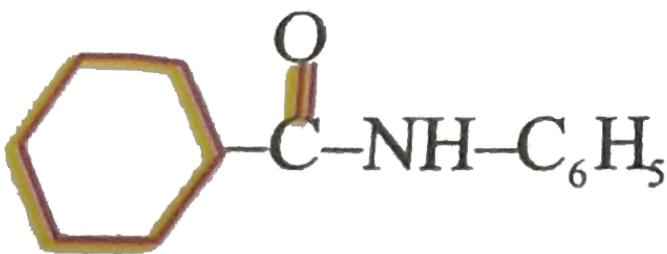
- A. 3-Cyclopropane -1-propene
- B. 4-Hydroxy-2-methylpentanal
- C. 1-Allylcyclopropane
- D. 3-Allylcyclopropane

Answer: B



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27. The IUPAC name is



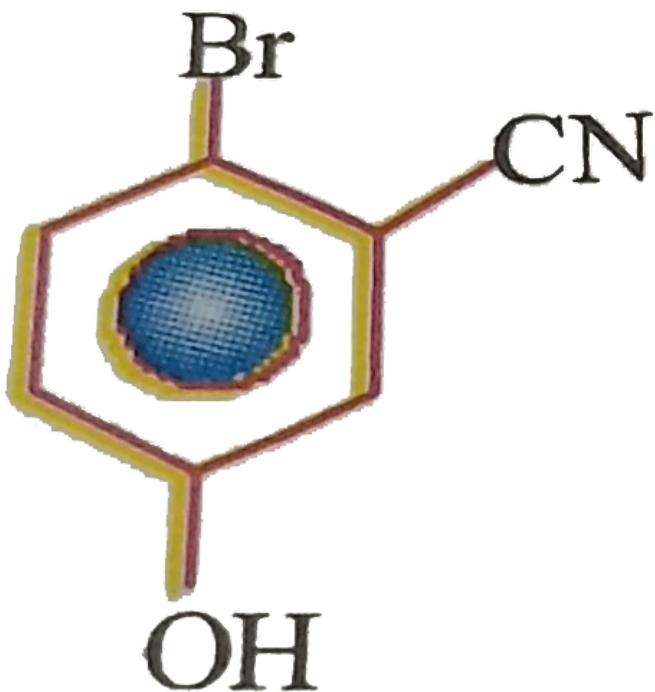
- A. N-Cyclohexyl benzamide
- B. N-Phenyl-N-cyclohexylmethanamide
- C. N-Phenylcyclohexane carboxamide
- D. N-Cyclohexyl-N-phenylmethylamide.

Answer: C



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28. The IUPAC name of the given compound is :



- A. 4-Bromo-3-cyanophenol

- B. 2-bromo-5-hydroxybenzonitrile
- C. 2-cyano-4-hydroxybromobenzene
- D. 6-bromo-3-hydroxybenzonitrile

Answer: D



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29. The *IUPAC* name of acraldehyde is

- A. 2 - Propenal
- B. Propenyl aldehyde

C. 2-Butenal

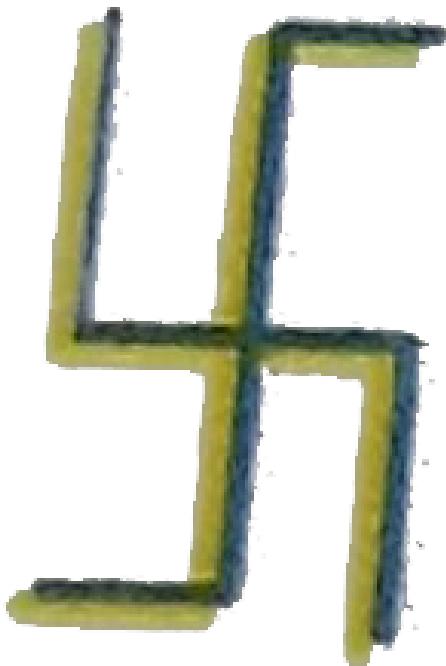
D. Propenal

Answer: A



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30. The IUPAC name of the given structure



- A. 3,3-Dimethylpentane
- B. 3,3-Diethylpentane
- C. 3-Ethyl-3-methylpentane

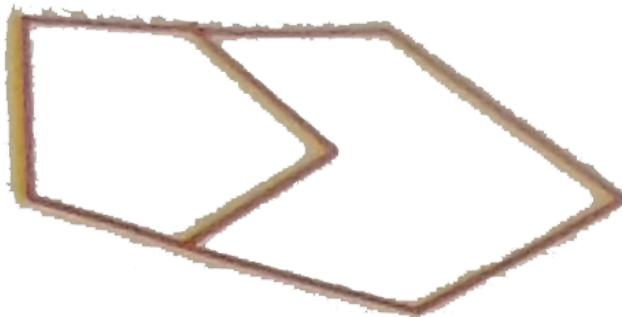
D. 3-Ethyl-3-ethylpentane

Answer: B



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31. The IUPAC name of the given structure



A. Bicyclo [3, 2, 1] octane

B. Bicyclo [3, 2, 2] octane

C. Spiro [3, 2, 1] octane

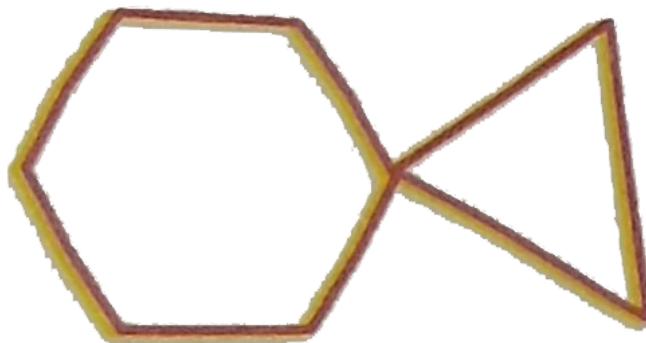
D. Bicyclo [5, 2, 1] octane

Answer: A



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32. The IUPAC name of the given structure



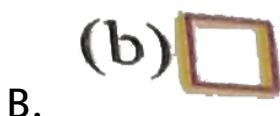
- A. Bicyclo [5, 5, 0] nonane
- B. Spiro [5, 2] octane
- C. Cyclopropyl cyclohexane
- D. Spiro [2, 5] octane

Answer: D



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33. The structure of bicyclo [1, 1, 0] butane is :



Answer: C



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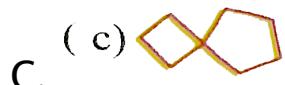
34. The structure of spiro [3.3] heptane is



A.



B.



D.

Answer: D



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35. The IUPAC name of the given compound



A. 5,6-Diethyl-3methyl-4decene

B. 7-Methyl-heptene

C. 6-Methyl heptene

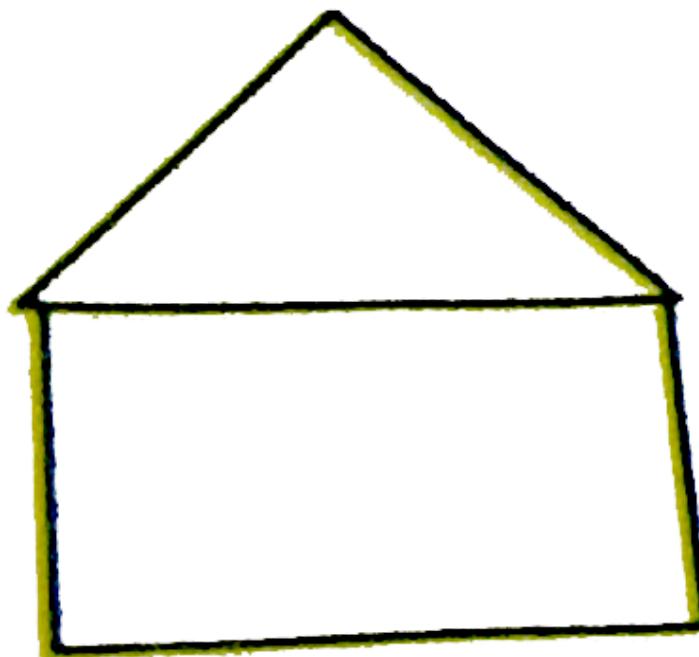
D. 3,3-Diethyl-5-ethyl-4-decene

Answer: A



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36. The IUPAC name of the compound



- A. Bicyclo [2, 1, 0] pentane
- B. 1, 2-Cyclopropyl cyclobutane

C. Cyclopentane [4, 3] annulene

D. 1, 2-Dimethylene cyclobutane

Answer: A



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Level I H W

**1. Main source of most of the organic compounds
is**

A. Coal tar

B. Petroleum

C. Both 1 & 2

D. Ammonia

Answer: C



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2. The first organic compound synthesised in the laboratory from an inorganic compound is

A. Wohler

B. Kolbe

C. Berzelius

D. Neil Barthlot

Answer: A



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3. CATENATION AND THE SHAPES OF CARBON COMPOUNDS

A. Carbon has high catenation ability

B. Tetravalency of carbon

C. Isomerism of organic compounds

D. All of these

Answer: D



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4. Which of the following contains acetic acid?

A. Vinegar

B. Molasses

C. Coal tar

D. Butter

Answer: A



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5. The $C - C - C$ bond angle in benzene is

A. $109^\circ 28$

B. 180°

C. 120°

D. 100°

Answer: C



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6. $CH_2 = C = CH_2$. Hybridisation of central carbon is

A. sp

B. sp^2

C. sp^3

D. sp^3d

Answer: A



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7. Which of the following has minimum C - H bond length



Answer: B



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8. Which of the following is not a cyclic compound?

A. Anthracene

B. Pyrrole

C. Phenol

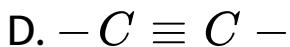
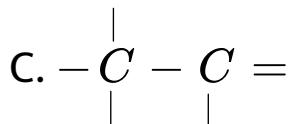
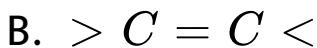
D. Isobutylene

Answer: D



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9. Which of the following bonds is strongest?



Answer: D



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10. The number of sigma (σ) and pi (π) bonds present in acetylene are _____ respectively.

A. 1,2

B. 2,1

C. 5,2

D. 3,2

Answer: D



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11. Which hybrid orbitals are involved in the $CH_3 - CH = CH - CH_3$ compound

- A. sp and sp^3
- B. sp^2 and sp^3
- C. sp and sp^2
- D. only sp^3

Answer: B



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12. The compounds in which C uses its sp^3 -hybrid orbitals for bond formation are:

- A. HCOOH
- B. CH_3CHO
- C. $(\text{CH}_3)_3\text{COH}$
- D. $(\text{NH}_2)_2\text{CO}$

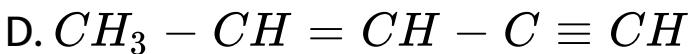
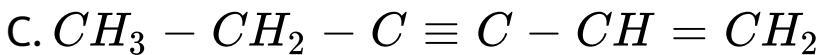
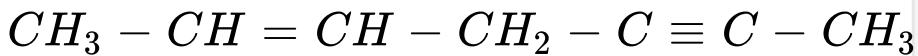
Answer: C



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13. Which compound given below has sp^3 , sp^2 and sp orbitals in the ratio of 6: 3: 2?

A.



Answer: A



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14. Which of the following is hetero cyclic compound?

A. Anthracene

B. Pyrrole

C. Phenol

D. Isobutylene

Answer: B



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15. $-C\begin{array}{l} O \\ || \end{array}$ – group is present in

- A. ketones only
- B. aldehydes only
- C. Carboxylic acid only
- D. all the above

Answer: D



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16. IUPAC RULES WHEN POLY FUNCTIONAL GROUPS CONTAINING MORE THAN TWO LIKE FUNCTIONAL GROUPS

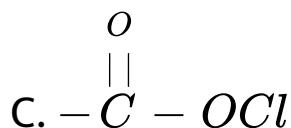
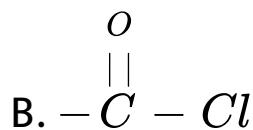
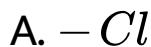
- A. $-OH$
- B. $-CHO$
- C. '-CO-
- D. $-CONH_2$

Answer: D



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17. The functional group present in acylchlorides
is



Answer: B



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18. IUPAC name of ethers is

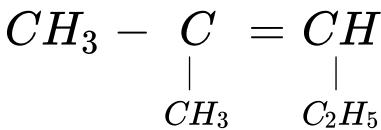
- A. Alkoxy alkane
- B. alkanol
- C. alkanal
- D. alkyl alkanoate

Answer: A



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19. The correct IUPAC name of



- A. 1,2 -diethyl butene
- B. 2 - ethyl -3- methyl pentene
- C. 3 , 4 - dimethyl hex -3- ene
- D. 2 - methyl pent -2- ene

Answer: D



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20. The IUPAC name of the compound



A. Lactic acid

B. 2 - Hydroxy propanoic acid

C. 3 - Hydroxy propanoic acid

D. Carboxy propanol

Answer: B



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21. The *IUPAC* name of



- A. 2, 2-Dimethyl-4-pentene
- B. 4, 4-Dimethyl-1-pentene
- C. 1, 1, 1-trimethyl-3-butene
- D. 4, 4, 4-trimethyl-1-butene

Answer: B



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22. The structure of allylchloride is

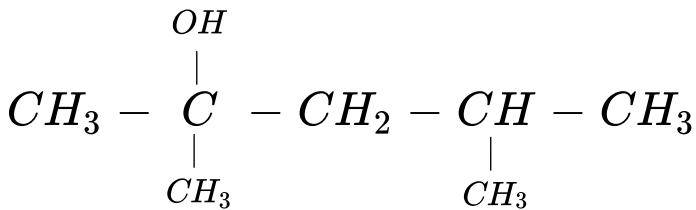
- A. $CH_2 = CH - CH_2Cl$
- B. $CH_2 = C(Cl) - CH_3$
- C. $CH(Cl) = CH - CH_3$
- D. $CH(Cl) = C(Cl) - CH_3$

Answer: A



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23. The *IUPAC* name of



is

- A. 2, 4-Dimethyl pentanol -2
- B. 2, 4 - Dimethyl pentanol -4
- C. 2, 2 - Dimethyl butanol - 2
- D. Butanol - 2

Answer: A



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24. IUPAC name of

$CH_3 - CHCl - CH_2 - CHO$ is

A. 2-chloro-4-butanol

B. 3-chlorobutanol

C. 2-chloro-4-butanol

D. 3-chlorobutanal

Answer: D



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25. The correct IUPAC name of $CH_2 = CHOH$ is

A. ethenol

B. ethanol

C. ethenal

D. ethanal

Answer: A



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26. 4 - methyl penta-1, 2- diene is

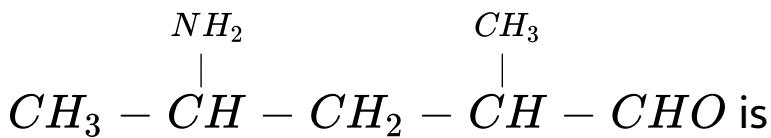


Answer: D



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27. The IUPAC name of



- A. 4-amino-2-methyl pentanal
- B. 2-hydroxy -4- methyl pentanal
- C. 4-hydroxy-2- methyl pentanol
- D. 2-hydroxy-4- methyl pentanol

Answer: A



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Level II H W

1. When a mixture of potassium cyanate and ammonium chloride is heated, it gives

- A. Urea
- B. Methanamide
- C. Ethanamide
- D. Ethanamine

Answer: A



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2. $C - C$ bond length in benzene is

A. 1.54 \AA°

B. 1.34 \AA°

C. 1.39 \AA°

D. 1.20 \AA°

Answer: C



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3. Ratio of pure and hybrid orbitals in benzene

A. 3 : 2

B. 2 : 3

C. 1 : 2

D. 2 : 1

Answer: B



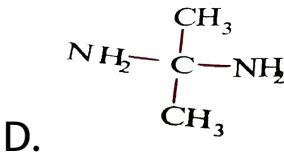
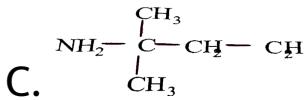
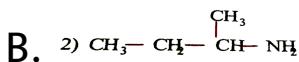
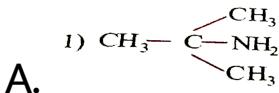
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4.

which

of the following explains this structure



Answer: A



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5. The compound which has one isopropyl group is

A. 2,2,3,3-tetramethyl pentane

B. 2,2-dimethyl pentane

C. 2,2,3-trimethyl pentane

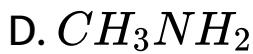
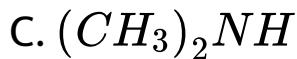
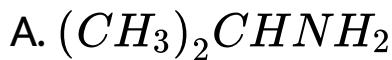
D. 2-methyl pentane

Answer: D



Watch Video Solution

6. The structural formula of methyl amino methane is



Answer: C



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7. The number & type of carbon atoms present in neopentane are

- A. four 1° carbons, one 4° carbon
- B. two 1° carbons , two 2° carbons
- C. one 1° carbon , one 4° carbon
- D. one 1° carbon , one 4° carbon

Answer: A



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8. Which of the following sets contains only carbocyclic compounds?

- A. Thiophene, Oxirane, Pyrrolidine
- B. Piperidine, Cyclohexane, Benzene
- C. Naphthalene, Cyclopropane, Bi-phenyl
- D. Pyridine, Thiophene, Oxetane

Answer: C



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9. The number of π electrons in anthracene is

A. 6

B. 10

C. 12

D. 14

Answer: D



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10. Which of the following is non aromatic compound

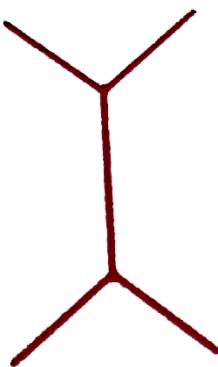
- A. Phenol
- B. Naphthalene
- C. pyridine
- D. Cyclo octatetraene

Answer: D



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11. The IUPAC name of the given structure



(or)



is

A. 2,2 - Dimethyl butane

B. Isohexane

C. 2,3 - Dimethyl butane

D. Di isohexane

Answer: C



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12. The IUPAC name of the compound

$CH_3 - CH(NH_2)CH_2COOCH_3$ is

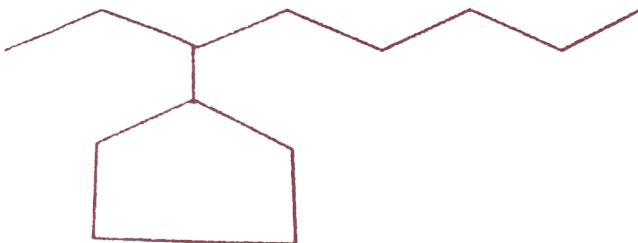
- A. Methyl-2-amino butanoate
- B. Methyl-3- amino butanoate
- C. Methyl - 4 - amino butanoate
- D. 2 - amino pentanoate

Answer: B



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13. The IUPAC name of the given compound



is

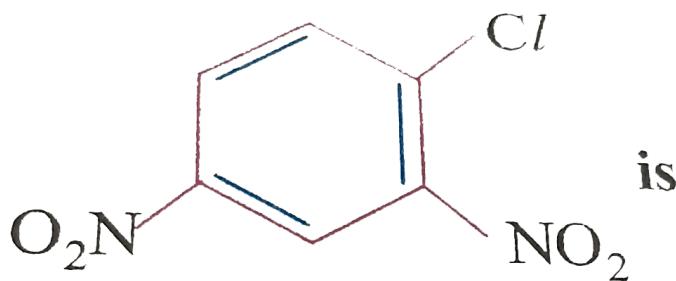
- A. Octyl cyclopentane
- B. 3- cyclopentyl octane
- C. Cyclopentane octane
- D. 6- cyclopentyl octane

Answer: 2



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14. The IUPAC name of the following compound



- A. 1-Chloro-2,4 - dinitro benzene
- B. 2 - Chloro - 1, 4-dinitro benzene
- C. 1, 3 - Dinitro - 2 - chloro benzene
- D. 4 - Chloro -1, 3-dinitro benzene

Answer: A



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15. IUPAC name of



- A. 3 – Carboxylic pentane– 1, 5 – dioic acid
- B. Propane– 1, 2, 3 – trioic acid
- C. 1, 2, 3 – tricarboxylic propane
- D. Propane– 1, 2, 3 – tricarboxylic acid

Answer: D



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16. IUPAC name of $CH_2OH - CH_2OH$ is

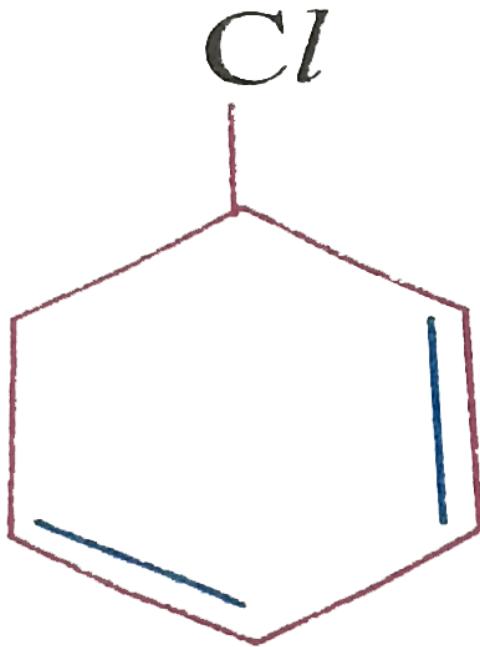
- A. 1, 2 - dihydroxy ethane
- B. Ethylene glycol
- C. Ethane - 1, 2- diol
- D. Ethane - 1, 2 - dial

Answer: C



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17. What is the IUPAC name of the following



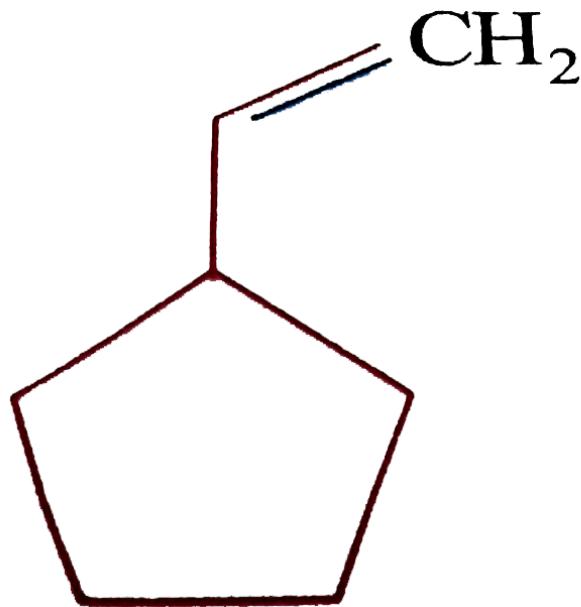
- A. 3 - chloro cyclo hexa - 1, 5 - diene
- B. 5 - chloro cyclo hexa - 1, 3 - diene
- C. 1 - chloro cyclo hexa - 2 , 5 - diene
- D. 2 - chloro cyclo hexa - 1, 4 - diene

Answer: B



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18. What is the IUPAC name of the following



A. Ethenyl cyclo pentane

- B. cyclopentyl ethene
- C. cyclopentyl ethylene

D. vinyl cyclopentane

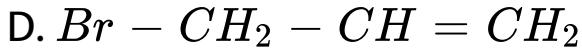
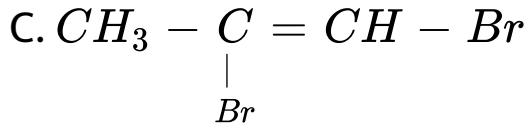
Answer: C



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19. The structure of 3-bromoprop-1-ene is

- A. $CH_3 - \overset{Br}{C} = CH_2$
- B. $CH_3 - CH = CH - Br$

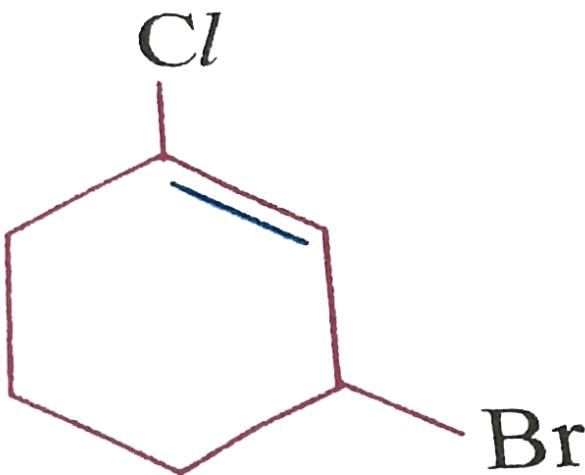


Answer: D



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20. The IUPAC name of the compound shown below is



- A. 2-bromo-6-chlorocyclohex-1-ene
- B. 6-bromo-2-chlorocyclohexene
- C. 3-bromo-1-chlorocyclohexene
- D. 1-bromo-3-chlorocyclohexene

Answer: C



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21. The systematic name of



- A. 2-Propanoic acid
- B. Isobutanoic acid
- C. 2-Methylpropanoic acid
- D. 2-Methylbutanoic acid

Answer: C



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