

Exercise - I

(Only one option is correct)

1. How many 1° carbon atom will be present in a simplest hydrocarbon having two 3° and one 2° carbon atom ?

- (A) 3 (B) 4
(C) 5 (D) 6

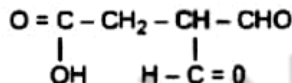
2. C₃H₆Br₂ can shows :

- (A) Two gem dibromide
(B) Three vic dibromide
(C) Two tert. dibromo alkane
(D) Two sec. dibromo alkane

3. The IUPAC name of the compound CH₃CH = CHCH = CHC ≡ CCH₃ is :

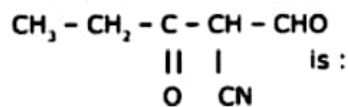
- (A) 4,6-octadiene-2-yne
(B) 2, 4-octadiene-6-yne
(C) 2-octyn-4, 6-diene
(D) 6-octyn-2, 4-diene

4. The correct IUPAC name of the following compound is :



- (A) 3,3-diformyl propanoic acid
(B) 3-formyl-4-oxo-butanoic acid
(C) 3,3-dioxo propanoic acid
(D) 3,3-dicarbalddehyde propanoic acid

5. The correct IUPAC name of compound :

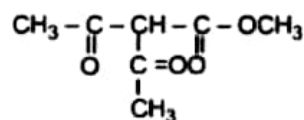


- (A) 2-cyano-3-oxopentanal
(B) 2-formyl-3-oxopentanenitrile
(C) 2-cyano-1,3-pentanedione
(D) 1,3-dioxo-2-cyanopentane

6. All the following IUPAC name are correct except :

- (A) 1-chloro-1-ethoxy propane
(B) 1-amino-1-ethoxypropane
(C) 1-ethoxy-2-propanol
(D) 1-ethoxy-1-propanamine

7. IUPAC name of :

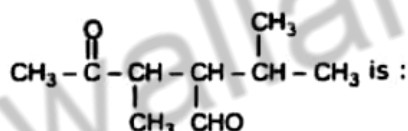


- (A) Methyl-2, 2 acetyl ethanoate
(B) 2,2 acetyl-1-methoxy ethanone
(C) Methyl-2-acetyl-3-oxobutanoate
(D) None

8. The IUPAC name of β-ethoxy-α-hydroxy propionic acid (trivial name) is :

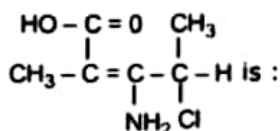
- (A) 1,2-dihydroxy-1-oxo-3-ethoxy propane
(B) 1-carboxy-2-ethoxy ethanol
(C) 3-Ethoxy-2-hydroxy propanoic acid
(D) All above

9. The IUPAC name of compound



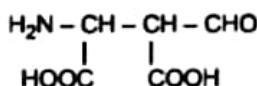
- (A) 3,5-Dimethyl-4-Formyl pentanone
(B) 1-Isopropyl-2-methyl-4-oxo butanal
(C) 2-Isopropyl-3-methyl-4-oxo pentanal
(D) None of the above

10. The IUPAC name of compound



- (A) 2-amino-3-chloro-2-methyl-2-pentenoic acid
(B) 3-amino-4-chloro-2-methyl-2-pentenoic acid
(C) 4-amino-3-chloro-2-methyl-2-pentenoic acid
(D) All of the above

11. The IUPAC name of the structure is :

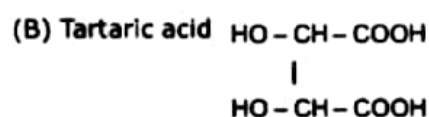
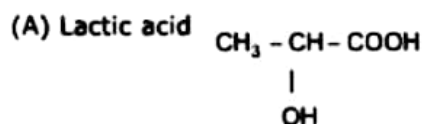


- (A) 3-amino-2-formyl butane-1, 4-dioic acid
(B) 3-amino-2, 3-dicarboxy propanal
(C) 2-amino-3-formyl butane-1, 4-dioic acid
(D) 1-amino-2-formyl succinic acid

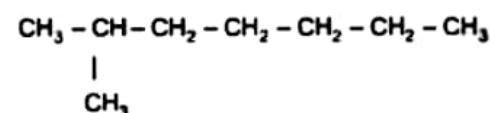
12. How many carbons are in simplest alkyne having two side chains ?

- (A) 5 (B) 6
(C) 7 (D) 8

13. Which of the following is not correctly matched :



(D) Iso-octane



14. Which of the following pairs have absence of carbocyclic ring in both compounds ?

- (A) Pyridine, Benzene
(B) Benzene, Cyclohexane
(C) Cyclohexane, Furane
(D) Furane, Pyridine

15. The commercial name of trichloroethene is :

- (A) Westron (B) Perclene
(C) Westrosol (D) Orlone

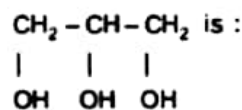
16. The compound which has one isopropyl group is :

- (A) 2,2,3,3-tetramethyl pentane
(B) 2,2-dimethyl pentane
(C) 2,2,3-trimethyl pentane
(D) 2-methyl pentane

17. How many secondary carbon atoms does methyl cyclopropane have ?

- (A) None (B) One
(C) Two (D) Three

18. The IUPAC name of the compound



- (A) 1,2,3-tri hydroxy propane
(B) 3-hydroxy pentane-1,5 diol
(C) 1,2,3-hydroxy propane
(D) Propane-1,2,3-triol

19. As per IUPAC rules, which one of the following groups, will be regarded as the principal functional group?

- (A) $-\text{C} \equiv \text{C}-$ (B) $-\text{OH}$
(C) $-\text{C}-$ (D) $-\text{C}-\text{H}$
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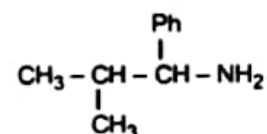
20. Which of the following is the first member of ester homologous series ?

- (A) Ethyl ethanoate
(B) Methyl ethanoate
(C) Methyl methanoate
(D) Ethyl methanoate

21. The correct IUPAC name of 2-ethyl-3-pentyne is :

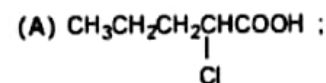
- (A) 3-methyl hexyne-4
(B) 4-ethyl pentyne-2
(C) 4-methyl hexyne-2
(D) None of these

22. The IUPAC name of the compound is

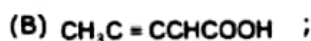


- (A) 1-amino-1-phenyl-2-methyl propane
(B) 2-methyl-1-phenyl propane-1-amine
(C) 2-methyl-1-amino-1-phenyl propane
(D) 1-isopropyl-1-phenyl methyl amine

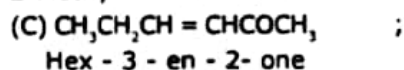
23. Which of the following compound is wrongly named ?



2-Chloro pentanoic acid

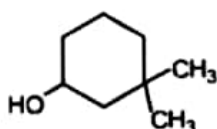


2-Methyl hex-3-enoic acid



4-Methyl pentanal

24. The IUPAC name of the given compound is :



- (A) 1,1-dimethyl-3-hydroxy cyclohexane
(B) 3,3-dimethyl-1-hydroxy cyclohexane
(C) 3,3-dimethyl-1-cyclohexanol
(D) 1,1-dimethyl-3-cyclohexanol

25. The IUPAC name of $(\text{C}_2\text{H}_5)_2\text{NCH}_2\text{CH}(\text{Cl})\text{COOH}$ is



- (A) 2-chloro-4-N-ethylpentanoic acid
(B) 2-chloro-3-(N,N-diethyl amino) - propanoic
(C) 2-chloro-2-oxo diethylamine
(D) 2-chloro-2-carboxy-N-ethyl ethane

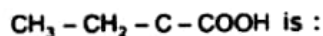
26. The IUPAC name of the compound $\text{Br}(\text{Cl})\text{Cl}.\text{CF}_3$ is

- (A) 2-bromo-2-chloro-2-iodo 1,1,1-trifluoroethane
(B) 1,1,1-trifluoro-2-bromo-2-chloro-2-iodo ethane
(C) 2-bromo-2-chloro-1,1,1-trifluoro-2-iodo ethane
(D) 1-bromo-1-chloro-2,2,2-trifluoro-1-iodo ethane

27. The group of hetrocyclic compounds is :

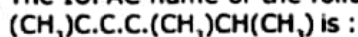
- (A) Phenol, Furane
(B) Furane, Thiophene
(C) Thiophene, Phenol
(D) Furane, Aniline

28. The correct IUPAC name of



- (A) 2-methyl butanoic acid
(B) 2-ethyl-2-propenoic acid
(C) 2-carboxy-1-butene
(D) None of the above

29. The IUPAC name of the following structure

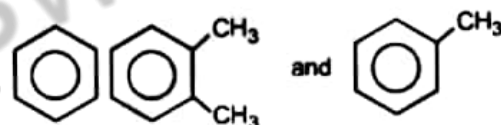


- (A) 3-methyl-4-hexynene-2
(B) 3-methyl-2-hexenyne-4
(C) 4-methyl-4-hexenyne-4
(D) all are correct

30. The IUPAC name of the following structure is

- $[\text{CH}_2\text{CH}(\text{CH}_3)]_2\text{C}(\text{CH}_2\text{CH}_3)\text{C}(\text{CH}_3)\text{C}(\text{CH}_2\text{CH}_3)_2$
(A) 3,5-diethyl-4,6-dimethyl-5-[1-methylethyl]-3-heptene
(B) 3,5-diethyl-5-isopropyl-4,6-dimethyl-2-heptene
(C) 3,5-diethyl-5-propyl-4,6-dimethyl -3-heptene
(D) None of these

31.



Number of secondary carbon atoms present in the above compounds are respectively :

- (A) 6,4,5
(B) 4, 5, 6
(C) 5,4,6
(D) 6,2,1

32. The IUPAC name of acetyl acetone is :

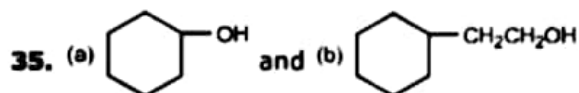
- (A) 2,5-Pentane dione
(B) 2,4-Pentane dione
(C) 2,4-Hexane dione
(D) 2,4-butane dione

33. When vinyl & allyl are joined each other, we get

- (A) Conjugated alkadiene
(B) comulative alkadiene
(C) Isolated alkadiene
(D) Allenes

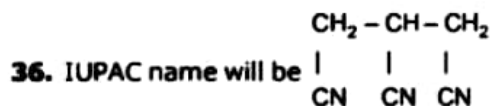
34. Glycerine is :

- (A) Propane triol-1,2,3
(B) Propylene trialcohol
(C) Propyl glycol
(D) Hvdroxy methyl alcvol



True statement for the above compounds is

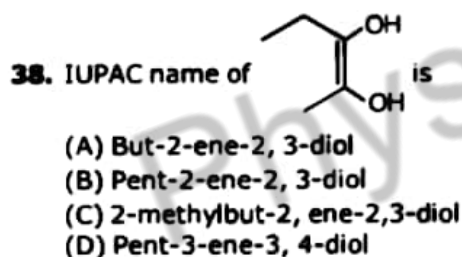
- (A) (a) is phenol while (b) is alcohol
 (B) Both (a) and (b) are primary alcohol
 (C) (a) is primary and (b) is secondary alcohol
 (D) (a) is secondary and (b) is primary alcohol



- (A) 1,2,3-Tricyano propane
 (B) Propane trinitrile-1,2,3
 (C) 1,2,3-cyano propane
 (D) Propane-1,2,3-tricarbonitrile

37. A substance containing an equal number of primary, secondary and tertiary carbon atoms is :

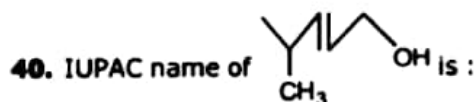
- (A) Mesityl Oxide (B) Mesitylene
 (C) Maleic acid (D) Malonic acid



39. The IUPAC name of $\text{BrCH}_2 - \text{CH} - \text{CO} - \text{CH}_2 - \text{CH}_2\text{CH}_3$ is :



- (A) 2-bromo methyl-3-oxo hexanamide
 (B) 1-bromo-2-amino-3-oxo hexane
 (C) 1-bromo - 2- amino-n-propyl ketone
 (D) 3-bromo-2-propyl propanamide



- (A) 5-methyl hexanol
 (B) 2-methyl hexanol
 (C) 2-methyl hex-3-enol
 (D) 4-methyl pent-2-en-1-ol

41. The IUPAC name of $\text{CH}_3\text{CH}_2 - \text{N} - \text{CH}_2\text{CH}_3$ is



- (A) N-methyl-N-ethyl ethanamine
 (B) diethyl methanamine
 (C) N-ethyl-N-methyl ethanamine
 (D) methyl diethyl ethanamine

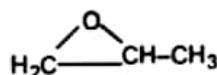
42. The molecular formula of the first member of the family of alkenynes and its name is given by the set

- (A) C₃H₂, alkene
 (B) C₃H₄, 1-penten-3-yne
 (C) C₆H₈, 1-hexen-5-yne
 (D) C₄H₄, butenyne



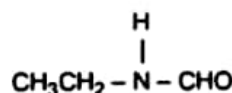
- (A) 1,2,3-tricarboxy-2-propanol
 (B) 2-hydroxy propane-1,2,3 tricarboxylic acid
 (C) 3-hydroxy-3-Carboxy, 1,5-pentane dioic acid
 (D) None

44. The IUPAC name of the compound :



- (A) Propylene Oxide
 (B) 1,2-Oxo propane
 (C) 1,2-Epoxy propane
 (D) 1,2-Propoxide

45. One among the following is the correct IUPAC name of the compound



- (A) N-Formyl aminoethane
 (B) N-Ethyl formyl amine
 (C) N-Ethyl methanamide
 (D) Ethylamino methanal