NEET : CHAPTER WISE TEST-12

SUBJECT :- CHEMISTRY **DATE.....**

CLASS :- 11th **NAME.....**

CHAPTER :- NOMENCLATURE **SECTION.....**

(SECTION-A)

1. Compound having open chain is -

(A) Pentane (B) Isopentane

(C) Neopentane (D) All the above

2. Which is an acyclic compound?

(A) Methane (B) Benzene

(C) Pyrrole (D) Cyclobutane

3. The total number of secondary H-atoms in the structure given below are :

$(CH_3)_2CHCH_2C_2H_5$

(A) 1 (B) 4 (C) 3 (D) 2

4. Iso-octane contains

(A) five 1°, one 2° and two 3° carbon atoms

(B) four 1°, two 2° and one 3° carbon atoms

(C) five 1°, one 2°, one 3° & one 4° carbon atoms

(D) five 1°, two 2°, one 3° & one 4° carbon atoms

5. How many 1°carbon atoms will be present in the simplest hydrocarbon having two 3° and one 2° carbon atoms?

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

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

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

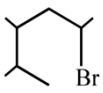
7. Which of the following is the first member of ester homologous series?

(A) Ethyl ethanoate

(B) Methyl ethanoate

(C) Methyl methanoate

(D) Ethyl methanoate

8. The IUPAC name of  is -

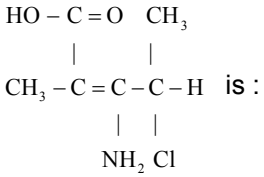
(A) 2-Bromo-4-isopropylpentane

(B) 2, 3-Dimethyl-5-bromohexane

(C) 2-Bromo-4, 5-dimethylhexane

(D) 5-Bromo-2, 3-dimethylhexane

9. IUPAC name of compound



is :

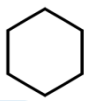
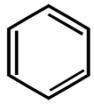
(A) 2-Amino-3-chloro-2-methylpent-2-enoic acid

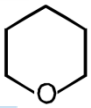
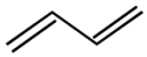
(B) 3-Amino-4-chloro-2-methylpent-2-enoic acid

(C) 4-Amino-3-chloro-2-methylpent-2-enoic acid

(D) All of the above

10. Identify the compound which is homocyclic, aromatic, and unsaturated?

(A)  (B) 

(C)  (D) 

11. The correct name of 3,3-dimethyl propanamide is

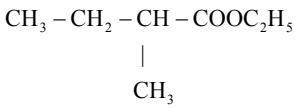
(A) 2-Methyl butanamide

(B) 3-Methyl butanamide

(C) Iso-propyl ethanamide

(D) Iso propyl acetamide

12. The IUPAC name of



is

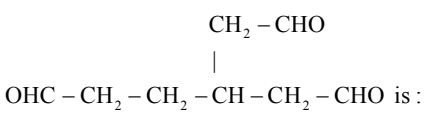
(A) 2-Ethyl-ethyl acetate

(B) Ethyl 3-methyl butanoate

(C) Ethyl 2-methyl butanoate

(D) 2-Methyl butanoic acid ethyl ester

13. The IUPAC name of



is :

(A) 4, 4-Di(formylmethyl) butanal

(B) 2-(Formylmethyl) butane-1, 4-dicarbaldehyde

(C) Hexane-3-acetal-1, 6-dial

(D) 3-(Formylmethyl) hexane-1, 6-dial

14. Which of the following is crotonic acid?
(A) CH_2= CH–COOH
(B) C_6H_5–CH=CH–COOH
(C) CH_3–CH=CH–COOH
(D) $\begin{matrix} CH-COOH \\ \| \\ CH-COOH \end{matrix}$

15. The derived name of $(CH_3)_3\ C-\underset{\displaystyle C_2H_5}{\overset{\displaystyle CH_3}{\underset{|}{\overset{|}{C}}}}-OH$ is –
(A) t-Butyl ethyl methyl carbinol
(B) t-Butyl ethylethanol
(C) t-Butyl ethyl methyl methanol
(D) None of these

16. CH_3–$CH(CH_3)CH_2$–C ≡ C–CH=CH_2 its derived name is
(A) 6-Methyl-1-heptenyne-3
(B) Iso-butyl vinyl acetylene
(C) Iso hexynyl ethylene
(D) None

17. Which of the following is not correctly matched?
(A) Acetonitrile CH_2 = CHCN
(B) Allyl chloride CH_2 = CH – CH_2Cl
(C) s-Butyl group CH_3–CH_2–C_2H_5
(D) Ethylene dichloride CH_2Cl –CH_2Cl

18. IUPAC name of,

$$OHC-CH=CH-\underset{\displaystyle CH_2CH_2CH_2CH_3}{\overset{\displaystyle CH_2}{\underset{|}{\overset{|}{CH}}}}-CH=CH_2$$ is :

(A) 4-Butyl-2,5-hexadien-1-al
(B) 5-Vinyloct-3-en-1-al
(C) 5-Vinyloct-5-en-8-al
(D) 3-Butyl-1, 4-hexadien-6-al

19. The IUPAC name of

$$CH_3-\underset{\displaystyle OH}{\overset{\displaystyle CH_2}{\underset{|}{\overset{|}{CH}}}}-\underset{\displaystyle OH}{\overset{\displaystyle C(CH_3)_2}{\underset{|}{\overset{|}{C}}}}$$ is :

(A) 2-Methyl-2, 4-dihydroxy propane
(B) 2,2-Dimethyl-4-hydroxy butanol
(C) 2-Methyl-2, 4-pentane diol
(D) 2-Hydroxy-4, 4-dimethyl butanol-4

20. The IUPAC name of $(CH_3)_2$ CH-CO-O-CH_2-CH_3 is :
(A) Ethyl butyrate
(B) Isopropyl propionate
(C) Ethyl-2-methyl propanoate
(D) Isobutyl ethanoate

21. One among the following is the correct IUPAC name for the compound

$$CH_3CH_2-\underset{\displaystyle H}{\overset{\displaystyle CHO}{\underset{|}{\overset{|}{N}}}}$$

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

22. The systematic name for

$$HO-\underset{\displaystyle O}{\overset{\displaystyle CH_3}{\underset{\|}{\overset{|}{C}}}}-\underset{\displaystyle NH_2Cl}{\overset{\displaystyle CH-CH_3}{\underset{|}{\overset{|}{C}}}}=C-$$ is :

(A) 2-Methyl-3-amino-4-chloro-2-pentenoic acid
(B) 1-Hydroxy-1-oxo-2-methyl-3-amino-4-chloro-2- pentene
(C) 3-Amino-4-chloro-2-methyl-2-pentenoic acid
(D) 3-Amino-2, 4-dimethyl-4-chloro-2-butenoic acid

23. $CH_3-O-\underset{\displaystyle O}{\overset{}{\underset{\|}{\overset{}{C}}}}-CH_2-COOH$

The correct systematic name of the above compound is :
(A) 2-Acetoxy ethanoic acid
(B) 2-Methoxy carbonyl ethanoic acid
(C) 3-Methoxy formyl ethanoic acid
(D) 2-Methoxy formyl acetic acid

24. The IUPAC name of

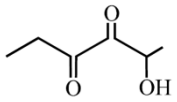
$$HC\equiv C-CH_2-CH_2-\underset{\displaystyle CH_2=CH}{\overset{\displaystyle H}{\underset{|}{\overset{|}{C}}}}=CH-C=O$$ is :

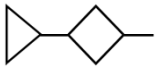
(A) 3-(1-Butynyl)-3-vinyl-2-pentadienal
(B) 5-Ethynyl-3-vinyl-2-pentenal
(C) 3-Vinyl-2-heptene-6-ynal
(D) 5-Acetylenyl-3-ethenyl-2-pentenal

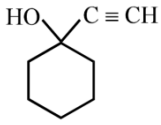
25. The IUPAC name of

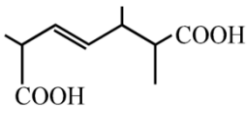
$$(CH_3)_2CH(CH_2)_2-\underset{\displaystyle O}{\overset{}{\underset{\|}{\overset{}{C}}}}-N(CH_3)_2$$ is –

(A) N, N, 4-Trimethylpentanamide
(B) Dimethylamino-4-methylpentanone
(C) N, N-Dimethylamino-4-methylpentanamide
(D) 2-Methyl-5-oxodimethylpentanamine

26. The IUPAC name of  is –
(A) 5-Hydroxy-3, 4-hxanedione
(B) 3, 4-Dioxo-2-hexanol
(C) 2-Hydroxy-3, 4-hexanedione
(D) 2-Hydroxy-3, 4-diketohexane

27. The IUPAC name of  is -
(A) 3-Cyclobutylcyclopropane
(B) 1-Cyclopropyl-3-methylcyclobutane
(C) 1, 3-Cyclopropylmethylcyclobutane
(D) 2-Methylbicyclo [4.3.0] heptane

28. The IUPAC name of  is -
(A) 1-Ethynyl-1-hydroxycyclohexane
(B) 1-(Hydroxycyclohexyl) ethyne
(C) 1-Ethynylcyclohexanol
(D) 1-Acetylenyl-1-hydroxycyclohexane

29. The IUPAC name of 

(A) 6-Carboxy-2, 3-dimethyl-4-heptenoic acid
(B) 2, 3, 6-Trimethyl-1-heptene-1, 7-dioic acid
(C) 2, 5, 6-Trimethyl-3-heptenedioic acid
(D) 6-Carboxy-2, 5-dimethyl-3-heptenoic acid

30. The IUPAC name of $[(CH_3)_3C]_4C$ is -
(A) Tetra-t-butyl methane
(B) 3, 3-Bis(1, 1-dimethyl ethyl) -2, 2, 4, 4-tetramethyl pentane
(C) Tetra kis (1, 1-diemthyl ethyl) methane
(D) Tetraneobutyl methane

31. Which of the following are secondary radicals?

(a) $CH_3-\dot{C}H-C_2H_5$ (b) $CH_2=\dot{C}-CH_3$
(c) $CH_2=CH\bullet$ (d) $(CH_3)_2CH\bullet$

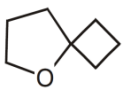
(A) a, b, c (B) a, d, c
(C) b, c, d (D) a, b, d

32. Common name of the structure $\begin{matrix}CH_2-OH\\|\\CH_2-OH\end{matrix}$

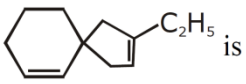
(A) Ethylene Glycol
(B) Ethene dialcohol
(C) Glycerol
(D) Ethylene alcohol

33. Common name of the compound $CH_3-CH_2-\overset{\overset{O}{\|}}{C}-NH_2$ is -

(A) Acetamide (B) Propionamide
(C) Butyramide (D) Acetic amide

34. The correct IUPAC name of the spiro compound  is –

(A) 1-Oxaspiro [4.3] octane
(B) 5-Oxaspiro [3.4] octane
(C) 1-Oxaspiro [3.4] octane
(D) 5-Oxaspiro [4.3] octane

35. The IUPAC name of the spiro compound  is

(A) 8-Ethyl [4.5] deca-1, 7-diene
(B) 2-Ethyl spiro [5.4] deca-1,6-diene
(C) 3-Ethyl spiro [5.4] deca-3,7 diene
(D) 2-Ethyl spiro [4.5] deca-2,6-diene

(SECTION-B)

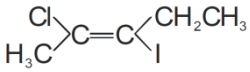
36. Number of 4° carbon atoms present in the compound are :-

$$CH_3-\overset{\overset{CH_3}{|}}{\underset{\underset{CH_3}{|}}{C}}-\overset{\overset{CH_3}{|}}{CH}-CH_2-CH_3$$

(A) 4 (B) 2 (C) 3 (D) 1

37. 3–Methyl–2–pentanone is :

(A) $CH_3-\overset{\overset{O}{\|}}{C}-\overset{\overset{CH_3}{|}}{CH}-CH_2-CH_3$
(B) $CH_3-\underset{\underset{CH_3}{|}}{CH}-CH_2-COOH$
(C) $C_2H_5-CH=\overset{\overset{CH_3}{|}}{C}-CH_2-CH_3$
(D) $CH_3-CH_2-CH=CH_2$

38. The IUPAC name for the compound 

(A) 3–Iodo–4–chloro–3–pentene
(B) 2–Chloro–2–iodo–2–pentene
(C) 2–Chloro–3–iodo–2–pentene
(D) 3–Iodo–4–chloro–2–pentene

39. The correct decreasing order of priority for the functional groups of organic compounds in the IUPAC system of nomenclature is
(A) $-SO_3H$, $-COOH$, $-CONH_2$, $-CHO$
(B) $-CHO$, $-COOH$, $-SO_3H$, $-CONH_2$
(C) $-CONH_2$, $-CHO$, $-SO_3H$, $-COOH$
(D) $-COOH$, $-SO_3H$, $-CONH_2$, $-CHO$

40. Of the following compounds which has a wrong IUPAC name?

I. $CH_3-CH_2-CH_2-\overset{\overset{O}{\|}}{C}-O-CH_2-CH_3$

Ethyl butanoate

II. $CH_3-\underset{\underset{CH_3}{|}}{CH}-\overset{\overset{O}{\|}}{C}-\underset{\underset{CH_3}{|}}{CH}-CH_3$

2,4 Dimethyl -3- pentanone

III. $H_3C-\underset{\underset{OH}{|}}{CH}-\overset{\overset{CH_3}{|}}{CH}-CH_3$

2-Methyl -3- butanol

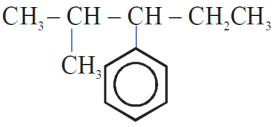
IV. $CH_3-CH_2-CH_2-CHO$

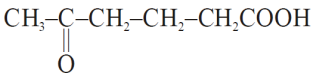
Butanal

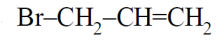
(A) I (B) II (C) III (D) IV

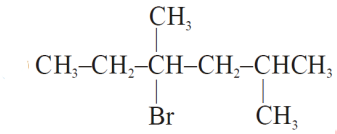
41. The IUPAC name of $CH_3COCH(CH_3)_2$ is –
(A) 4-Methylisopropyl ketone
(B) 3-Methyl-2-butanone
(C) Isopropylmethyl ketone
(D) 2-Methyl-3-butanone

42. Which nomenclature is not according to IUPAC system ?

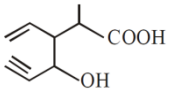
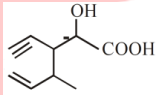
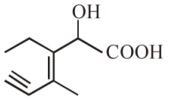
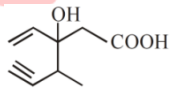
(A) 
2-Methyl-3-phenylpentane

(B) 
5-Oxohexanoic acid

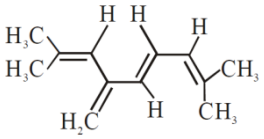
(C) 
1-Bromo-prop-2-ene

(D) 
4-Bromo,2,4-di methylhexane

43. Structure of the compound whose IUPAC name is 3-Ethyl-2-hydroxy-4-methylhex-3-en-5-ynoic acid is -

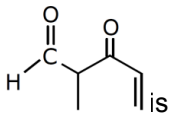
(A) 
(B) 
(C) 
(D) 

44. The total number of π-bond electrons in the followng structure is –



(A) 8 (B) 12 (C) 16 (D) 4

45. The IUPAC name of the compound

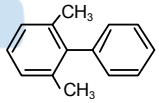
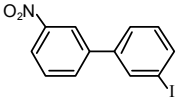
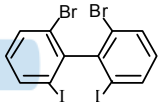
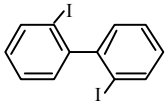

is

(A) 5-Formylhex-2-en-3-one
(B) 5-Methyl-4-xoohex-2-en-5-al
(C) 3-Keto-2-methylhex-5-enal
(D) 2-Methyl-3-oxopent-5-enal

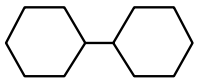
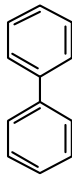
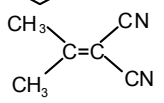
46. Which of the following acids does not exhibit optical isomerism ?
(A) Maleic acid (B) α-amino acids
(C) Lactic acid (D) Tartaric acid

47. The correct statement regarding the comparison of staggered and eclipsed conformations of ethane, is:
(A) The staggered conformation of ethane is more stable than eclipsed conformation, because staggered conformation has no torsional strain.
(B) The staggered conformation of ethane is less stable than eclipsed conformation, because staggered conformation has torsional strain.
(C) The eclipsed conformation of ethane is more stable than staggered conformation, because eclipsed conformation has no torsional strain.
(D) The eclipsed conformation of ethane is more stable than staggered conformation even though the eclipsed conformation has torsional strain.

48. Which of the following biphenyls is optically active

(A) 
(B) 
(C) 
(D) 

49. In which of the following molecules, all atoms are coplanar ?

(A) 
(B) 
(C) 
(D) 

50. With respect to the conformers of ethane, which of the following statements is true?
(A) Bond angle remains same but bond length changes
(B) Bond angle changes but bond length remains same
(C) Both bond angle and bond length changes
(D) Both bond angles and bond length remains same