

**NEET ANSWER KEY & SOLUTIONS**

**SUBJECT :- CHEMISTRY**

**CLASS :- 11<sup>th</sup>**

**PAPER CODE :- CWT-12**

**CHAPTER :- NOMENCLATURE**

**ANSWER KEY**

1. (D)	2. (A)	3. (B)	4. (C)	5. (B)	6. (B)	7. (C)
8. (D)	9. (B)	10. (B)	11. (B)	12. (C)	13. (D)	14. (C)
15. (A)	16. (B)	17. (A)	18. (A)	19. (C)	20. (C)	21. (C)
22. (C)	23. (B)	24. (C)	25. (A)	26. (C)	27. (B)	28. (C)
29. (C)	30. (B)	31. (D)	32. (A)	33. (B)	34. (B)	35. (D)
36. (D)	37. (A)	38. (C)	39. (D)	40. (C)	41. (B)	42. (C)
43. (C)	44. (A)	45. (D)	46. (A)	47. (A)	48. (C)	49. (B)
50. (D)						

**SOLUTIONS**

**SECTION-A**

1. (D)

Sol.  ⇒ All one open chain compounds

2. (A)

Sol. Methane is an acyclic compound.

3. (B)

Sol. 
$$\begin{array}{cccc} & \text{CH}_3 & 2^\circ & 2^\circ & 1^\circ \\ & | & & & | \\ \text{CH}_3 - & \text{CH} & - \text{CH}_2 - & \text{CH}_2 - & \text{CH}_3 \\ & 1^\circ & & & 3^\circ \\ & & & & | \\ & & & & \text{CH}_3 \end{array}$$
  
 $2^\circ$  Carbon atom = 2  
 $2^\circ$  Hydrogen atom = 4

4. (C)

Sol. 
$$\begin{array}{ccccccc} & 1^\circ & & & 1^\circ & & \\ & \text{CH}_3 & & & \text{CH}_3 & & \\ & | & & & | & & \\ 1^\circ & \text{CH}_3 - & \text{CH} - & \text{CH}_2 - & \text{C} - & \text{CH}_3 & 1^\circ \\ & 2^\circ & & & 4^\circ & & \\ & & & & | & & \\ & & & & \text{CH}_3 & & \end{array}$$

5. (B)

Sol. 
$$\begin{array}{ccccccc} & & \text{CH}_3 & 1^\circ & & \text{CH}_3 & 1^\circ \\ & & | & & & | & \\ 1^\circ & \text{CH}_3 - & \text{CH} - & \text{CH}_2 - & \text{C} - & \text{CH}_3 & 1^\circ \\ & & 3^\circ & & 2^\circ & & 3^\circ \end{array}$$
  
 $4 \rightarrow 1^\circ$  Carbon atoms

6. (B)

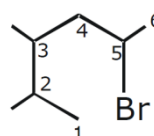
Sol. 
$$\begin{array}{c} \text{CH}_3 \\ | \\ \text{CH}_3 - \text{C} - \text{C} \equiv \text{CH} \\ | \\ \text{CH}_3 \end{array}$$

7. (C)

Sol. 
$$\text{H} - \overset{\text{O}}{\parallel} \text{C} - \text{O} - \text{CH}_3$$
  
 Methyl methanoate

8. (D)

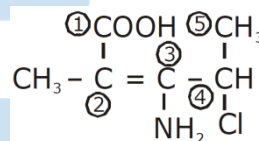
Sol.



5-Bromo-2, 3-dimethyl hexane

9. (B)

Sol.

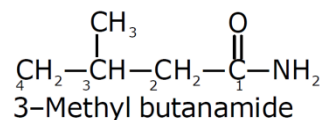


10. (B)

Sol. For homocyclic compound only carbon atoms should be there in ring. For unsaturated, compound double bond or triple bond should be there.

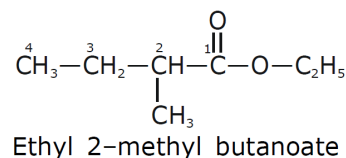
11. (B)

Sol.



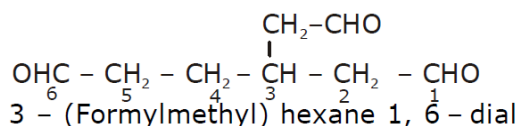
12. (C)

Sol.



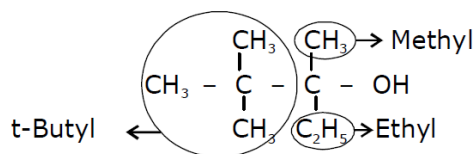
13. (D)

Sol.



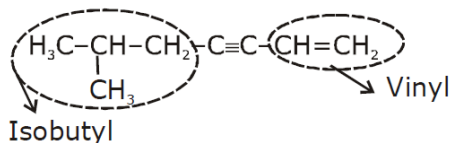
14. (C)  
Sol.  $\text{CH}_3 - \text{CH} = \text{CH} - \text{COOH}$

15. (A)  
Sol.



t-Butyl ethyl methyl carbinol  
t-Butyl ethyl methyl carbinol

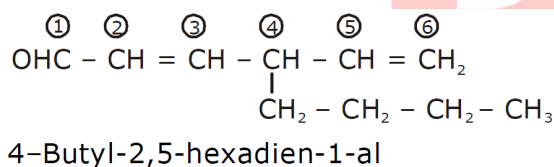
16. (B)  
Sol.



Iso-butyl vinyl acetylene.  
Iso-butyl vinyl acetylene.

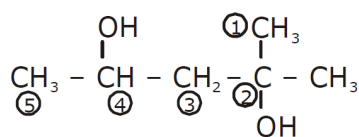
17. (A)  
Sol. Structure of acetonitrile ( $\text{CH}_3\text{CN}$ ) is incorrect.

18. (A)  
Sol.



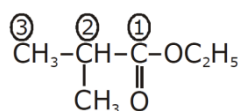
4-Butyl-2,5-hexadien-1-al

19. (C)  
Sol.



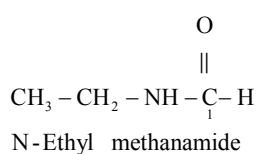
2-Methyl-2,4-pentane diol

20. (C)  
Sol.



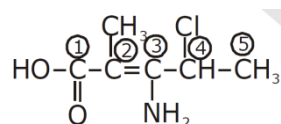
Ethyl-2-methyl propanoate

21. (C)  
Sol.



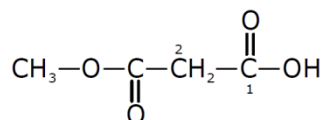
N-Ethyl methanamide

22. (C)  
Sol.



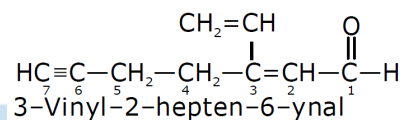
3-Amino-4-chloro-2-methyl-2-pentenoic acid

23. (B)  
Sol.



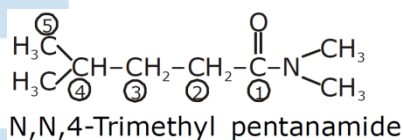
2-Methoxycarbonyl ethanoic acid

24. (C)  
Sol.



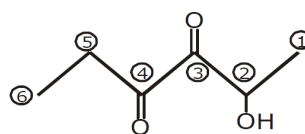
3-Vinyl-2-hepten-6-ynal

25. (A)  
Sol.



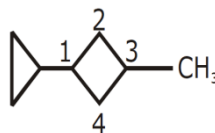
N,N,4-Trimethyl pentanamide

26. (C)  
Sol.

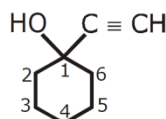


2-Hydroxy-3,4-hexanedione.  
2-Hydroxy-3,4-hexanedione.

27. (B)  
Sol.



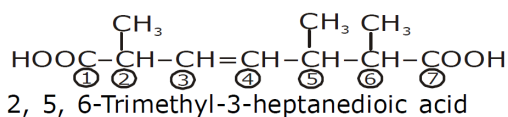
28. (C)  
Sol.



1-Ethynyl cyclohexanol.

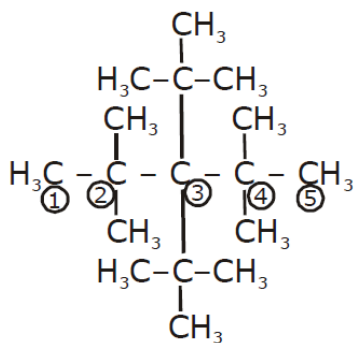
29. (C)

Sol.



30. (B)

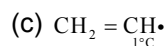
Sol.



3,3-Bis(1,1-dimethyl ethyl) ethyl)-2,2,4,4-tetramethyl pentane

31. (D)

Sol.



32. (A)

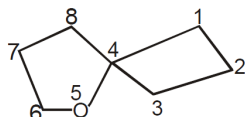
Sol. Adjacent carbon have  $-\text{OH}$  group and ethylene glycol is its common name.

33. (B)

Sol. Due to amide group and three carbon atoms.

34. (B)

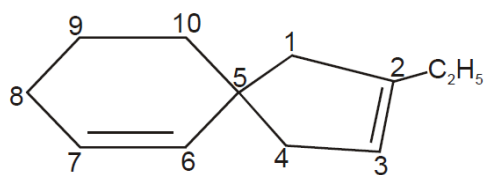
Sol.



5-Oxa spiro [3.4] octane

35. (D)

Sol.

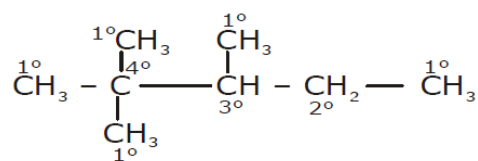


2-Ethyl spiro [4.5] deca-2,6-diene.

## SECTION-B

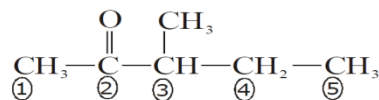
36. (D)

Sol.



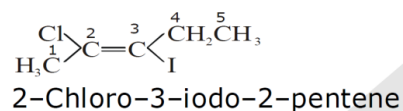
37. (A)

Sol.



38. (C)

Sol.



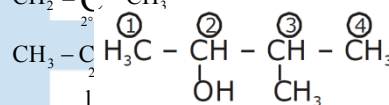
39. (D)

Sol.

Priority order,  
 $-\text{COOH} > -\text{SO}_3\text{H} > -\text{CONH}_2 > -\text{CHO}$

40. (C)

(b)  $\text{CH}_2 = \overset{\cdot}{\underset{2^\circ}{\text{C}}} - \text{CH}_3$

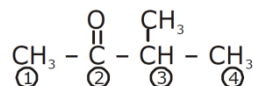


(d)

3-Methyl-2-butanol

41. (B)

Sol.



3-Methyl-2-butanone  
 3-Methyl-2-butanone

42. (C)

Sol.

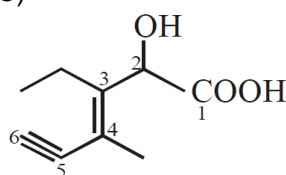


Correct IUPAC names is 3-Bromoprop-1-ene

Since double bond is given priority over a substituent ( $-\text{Br}$ )

43. (C)

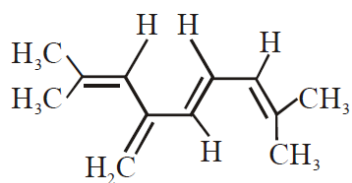
Sol.



3-Ethyl-2-hydroxy-4-methylhex-3-en-5-ynoic acid

44. (A)

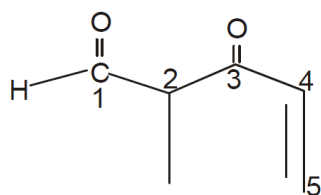
Sol.



Total  $\pi$  bonds = 4, Total  $\pi$  bond electrons = 8

45. (D)

Sol.

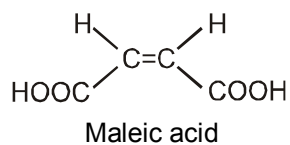


2-Methyl-3-oxopent-5-enal

2-Methyl-3-oxopent-5-enal

46. (A)

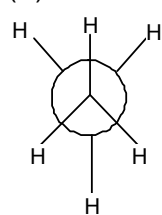
Sol.



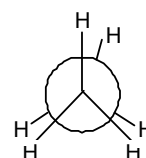
It shows Geometrical isomerism but does not show optical isomerism.

47. (A)

Sol.



Staggered  
Newmann  
conformation



Eclipsed  
Newmann  
conformation

due to bond pair – bond pair repulsion (Torsional strain) Eclipsed conformation is less stable than staggered conformation.

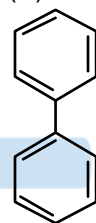
48. (C)

Sol.

O-substituted biphenyls are optically active as both the rings are not in one plane hence their mirror images are non-super imposable.

49. (B)

Sol.



Biphenyl

All carbon atom is  $sp^2$  hybridised and its geometry is trigonal planar.

50. (D)

Sol.

Among the three conformers of ethane (Eclipsed, staggered, gauche) bond angle and bond length remains the same while their energy, stability and dihedral angle are different.