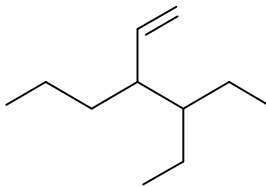
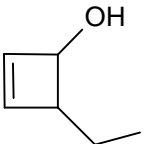
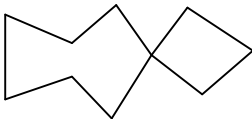

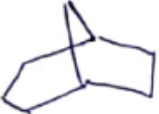
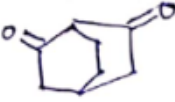

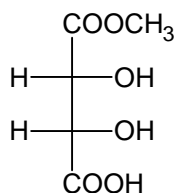


SINGLE CORRECT OPTION TYPE

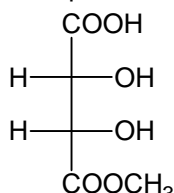
1. The correct IUPAC name of the compound  is
- (A) 3-(1-ethylpropyl)hex-1-ene  
(B) 3-ethyl-4-ethenyl heptane  
(C) 3-ethyl-4-propyl hex-5-ene  
(D) 4-ethyl-3-propyl hex-1-ene
2. The correct IUPAC name for  $\text{H}_2\text{C}=\text{CH}-\text{C}\equiv\text{CH}$  is  
(A) but-3-en-1-yne (B) but-1-en-3-yne (C) but-1-yn-3-ene (D) but-3-yn-1-ene
3. The IUPAC name of  $\text{C}_2\text{H}_5-\overset{\text{CH}_2}{\underset{\parallel}{\text{C}}}-\text{CH}_2-\overset{\text{CH}_3}{\underset{|}{\text{CH}}}-\text{NH}_2$  IS  
(A) 4-amino-2-ethylpent-1-ene (B) 2-ethylpentan-4-amine  
(C) aminopent-4-ene (D) 4-ethylpent-4-en-2-amine
4. The IUPAC name of  $\text{CH}_3\text{CH}(\text{OH})\text{CH}_2\text{CH}(\text{CH}_3)\text{CHO}$  is  
(A) 2-hydroxy-4-methylpentanal (B) 5-hydroxyhexanal  
(C) 4-hydroxy-2-methylpentanal (D) 2-methylpent-4-ol-1-al
5. The IUPAC name of  is
- (A) 4-ethyl cyclobut-2-en-1-ol (B) 4-ethyl cyclobut-1-en-3-ol  
(C) 3-ethyl cyclobut-1-en-2-ol (D) 2-ethyl cyclobut-3-en-1-ol
6. The correct IUPAC name of  is
- (A) 1,1-cyclobutyl heptane (B) bicyclo[6.3.0] nonane  
(C) spiro[3.6] decane (D) spiro[6.3] decane
7. Which name is incorrect?
- (A)  Bicyclo (2.2.1) hept-2-ene
- (B)  Bicyclo (3.2.1) octane
- (C)  Bicyclo (2.2.2) octane-2,6-dione
- (D)  Bicyclo (2.2.0) hexane

8. Acetone and propanal are \_\_\_\_\_ isomers.  
 (A) positional (B) functional (C) geometrical (D) optical

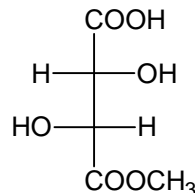
9. The correct statement about compounds I, II, III is



(I)



(II)



(III)

(A) I and II are identical

(B) I and II are diastereomers

(C) I and III are enantiomers

(D) I and II are enantiomers

10. The number of geometrical isomers in  $\text{CH}_3\text{CH}=\text{CHCH}_2\text{CH}=\text{CH}_2$  is

(A) 2

(B) 3

(C) 4

(D) 5

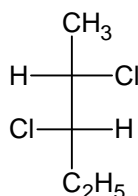
11. The absolute configuration of the following is

(A) 2S, 3R

(B) 2S, 3S

(C) 2R, 3S

(D) 2R, 3R



12. Which of the following is not a nucleophile.

(A)  $\text{H}_2$

(B)  $\text{CH}_3\text{OH}$

(C)  $\text{H}_2\text{O}$

(D)  $\text{NH}_3$

13. Choose the weakest acid among the following.

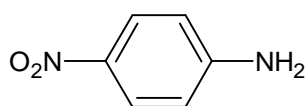
(A)  $\text{F}_3\text{C COOH}$

(B)  $\text{FCH}_2\text{ COOH}$

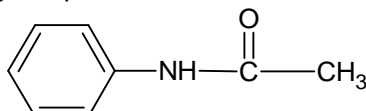
(C)  $\text{CH}_3\text{COOH}$

(D)  $\text{CH}_3\text{CH}_2\text{COOH}$

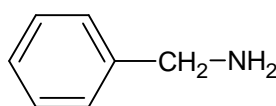
14. Which of the following compound is most basic?



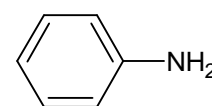
(A)



(B)

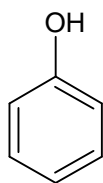


(C)

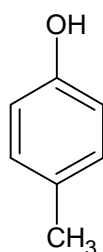


(D)

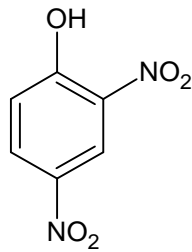
15. Strength of acidity order is:



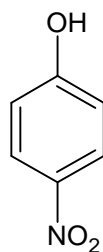
(I)



(II)



(III)



(IV)

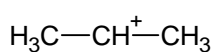
(A) II > I > III > IV

(B) III > IV > I > II

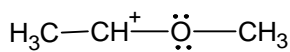
(C) I > IV > III > II

(D) IV > III > I > II

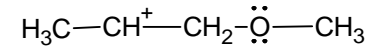
16. Correct order of decreasing stability of the following cations?



(I)



(II)



(III)

(A) I > II > III

(B) III > I > II

(C) II > I > III

(D) II > III > I

17. Among the following the aromatic compound is \_\_\_\_\_.



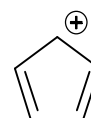
(A)



(B)



(C)



(D)

18.  $\text{CH}_2-\overset{\ominus}{\text{C}}(\text{O})-\text{CH}_3$  and  $\text{H}_2\text{C}=\overset{\ominus}{\text{C}}(\text{O})-\text{CH}_3$  are \_\_\_\_\_.

(A) resonating structures

(B) tautomers

(C) geometrical isomers

(D) optical isomers

19. Most basic compound in aqueous solution is \_\_\_\_\_.

(A)  $\text{NH}_3$

(B)  $\text{CH}_3-\text{NH}_2$

(C)  $(\text{CH}_3)_2\text{NH}$

(D)  $(\text{CH}_3)_3\text{N}$

20. The correct stability order of the following resonating structures is:

I.  $\text{CH}_2=\text{N}^+=\text{N}^-$

II.  $\text{H}_2\text{C}^+-\text{N}=\text{N}^-$

III.  $\text{H}_2\text{C}^--\text{N}^+\equiv\text{N}$

IV.  $\text{H}_2\text{C}^--\text{N}=\text{N}^+$

(A) I > II > IV > III

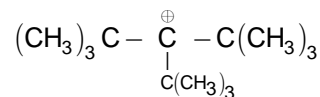
(B) I > III > II > IV

(C) II > I > III > IV

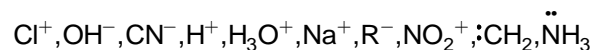
(D) III > I > IV > II

### INTEGER TYPE

21. The total number of contributing structures showing hyper conjugation for the following carbocation is \_\_\_\_\_.

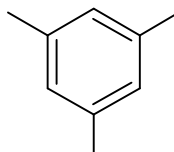


22. Amongst the following, the total number of electrophiles is \_\_\_\_\_.

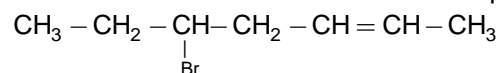


23. Total number of stereoisomer possible for the compound  $\text{CH}_3-\text{CH}=\text{CH}-\text{CH}=\text{CH}-\text{CH}=\text{CH}-\text{Ph}$  is \_\_\_\_\_.

24. The number of benzylic hydrogens in \_\_\_\_\_ is \_\_\_\_\_.



25. The number of stereoisomers of the compound is \_\_\_\_\_



### KEY

1.	D	2.	B	3.	D	4.	C	5.	A
6.	C	7.	D	8.	B	9.	A	10.	A
11.	B	12.	A	13.	D	14.	B	15.	B
16.	C	17.	B	18.	A	19.	C	20.	B
21.	0	22.	5	23.	8	24.	9	25.	4

☐ Wish You all the Best ☐