

نموذج الإجابة:

ملاحظة هامة: تصحيح الإمتحان سيكون بناء على الإجابة المكتوبة في الجدول أسفل (حرف الإجابة الصحيحة) ولن ينظر الى بقية الأوراق والتي تعتبر مسودة.

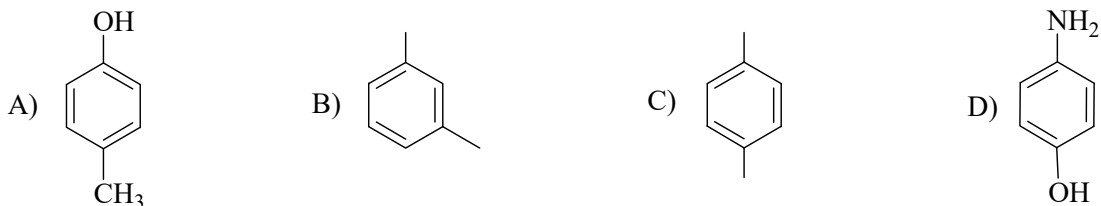
| رقم السؤال | الإجابة | رقم السؤال | الإجابة |
|------------|---------|------------|---------|
| 1 | D | 16 | D |
| 2 | C | 17 | A |
| 3 | B | 18 | C |
| 4 | D | 19 | A |
| 5 | B | 20 | B |
| 6 | A | 21 | B |
| 7 | D | 22 | C |
| 8 | C | 23 | A |
| 9 | A | 24 | D |
| 10 | C | 25 | C |
| 11 | B | 26 | D |
| 12 | B | 27 | B |
| 13 | A | 28 | C |
| 14 | A | 29 | B |
| 15 | B | 30 | A |

Choose The Correct Answer for Each of the Following Questions

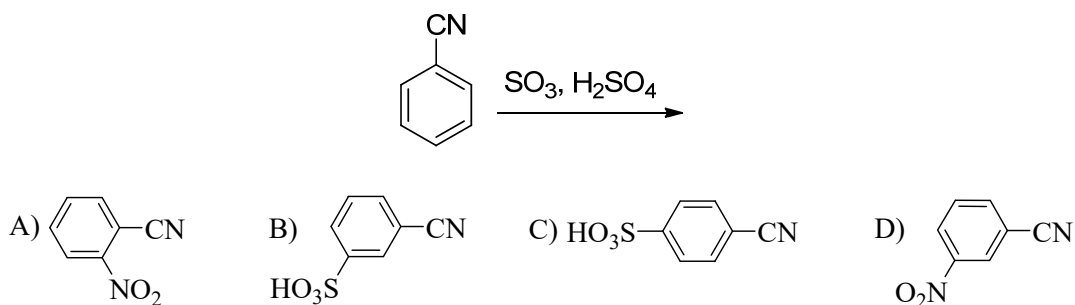
1. The hybridization of the carbons in benzene is _____

- A) sp B) sp^3d C) sp^3 D) sp^2

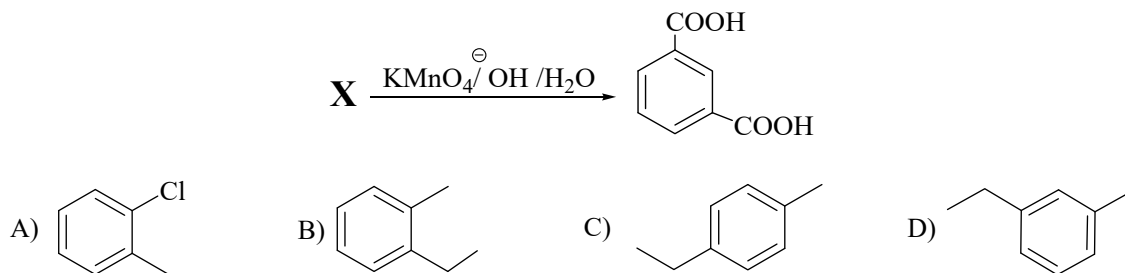
2. Which of the following compounds has the common name *p*-xylene?



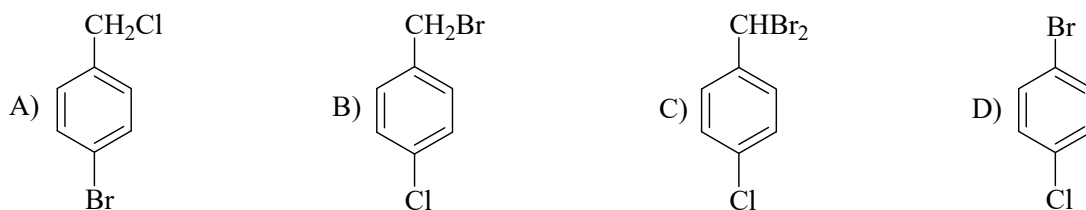
3. The product of the following reaction is _____



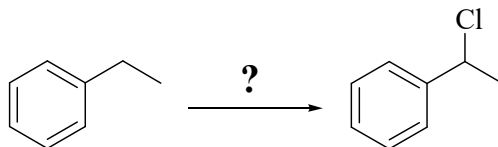
4. In the following reaction, the reactant X is _____



5. The structure of *p*-chlorobenzyl bromide is _____

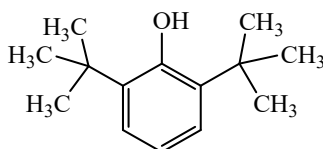


6. The reagent used in the following transformation is _____



- A) Cl_2/Light B) $\text{Cl}_2/\text{FeCl}_3$ C) HCl D) $\text{HCl}/\text{H}_2\text{O}$

7. The correct IUPAC name of the following structure is _____



- A) 1-hydroxy-3-methyl-6-isopropylbenzene B) 5-methyl-2-*t*-butylphenol
C) 3-hydroxy-4-*t*-butyl-1-methylbenzene D) 2,6-Di-*t*-butylphenol

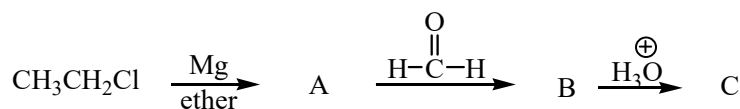
8. Which of the following compounds cannot be classified as a secondary halide?

- A) Isopropyl bromide B) Cyclohexyl iodide
C) 1-Chloro-1-isopropylcyclopentane D) 2-Bromobutane

9. The IUPAC name for Allyl chloride is _____

- A) 3-Chloro-1-propene B) 1-Chloro-1-propene
C) 1-Chloro-2-propene D) 2-Chloropropane

10. In the following sequence of reactions,



The compound 'C' is _____

- A) propanal B) *n*-butyl alcohol
C) *n*-propyl alcohol D) isopropyl alcohol

11. Oxidation of tertiary alcohol yields _____

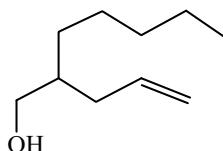
- A) Aldehyde B) No reaction C) Ketone D) Carboxylic acid

12. Among the following alkenes, which one produces *tert*-butyl alcohol upon acid-catalyzed hydration?

- A) $\text{CH}_3 - \text{CH} = \text{CH} - \text{CH}_3$
 C) $\text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH}_2$

- B) $(\text{CH}_3)_2\text{C} = \text{CH}_2$
 D) $\text{CH}_3 - \text{CH} = \text{CH}_2$

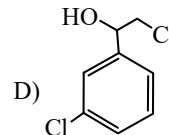
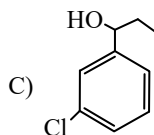
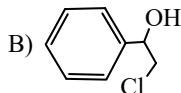
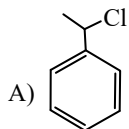
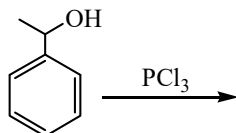
13. What is the correct name for the following compound?



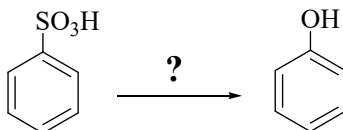
- A) 2-Pentyl-4-penten-1-ol
 C) 2-Allyl-1-heptanol

- B) 4-Pentyl-1-penten-5-ol
 D) 6-Allyl-7-heptanol

14. The resulting product from the following reaction is _____



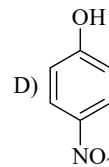
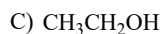
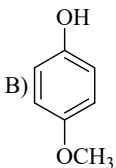
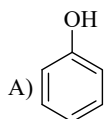
15. What reagent is needed to accomplish the following transformation?



- A) $\text{Na}_2\text{Cr}_2\text{O}_7 / \text{heat} / \text{H}_3\text{O}^+$
 C) $\text{KMnO}_4 / \text{H}_3\text{O}^+$

- B) $\text{NaOH} / \text{heat} / \text{H}_3\text{O}^+$
 D) $\text{Na} / \text{heat} / \text{H}_3\text{O}^+$

16. The most acidic compound is _____



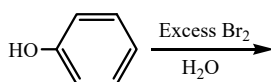
17. The IUPAC name of Anisole is _____

- A) Methoxybenzene
B) Phenyl ether
C) *t*-Butyl methyl ether
D) Ethyl phenyl ether

18. The common name for 1,2-Ethandiol is _____

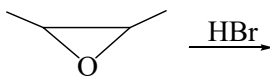
- A) Ethane glycol
B) Glycerol
C) Ehylene glycol
D) Dihydroxy ethane

19. The following reaction yields _____



- A) 2,4,6-Tribromophenol
B) *m*-Bromophenol
C) 2,4-Dibromophenol
D) *o*-Bromophenol

20. The following reaction gives _____



- A) 2-Bromo-3-butanol.
B) 3-Bromo-2-butanol.
C) 2-Bromobutanoxide.
D) 1-Bromo-2-butanol.

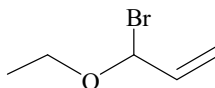
21. Ether is more volatile than an alcohol having the same molecular formula. This is due to _____

- A) Dipolar character of ethers
B) Hydrogen bonding in alcohols
C) Alcohols having resonance structures
D) Hydrogen bonding in ethers

22. Bromoethane reacts with X to form diethyl ether. What is X?

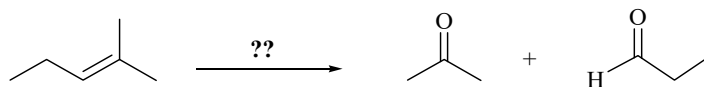
- A) NaOH
B) H₂SO₄
C) C₂H₅ONa
D) Na₂S₂O₃

23. The correct IUPAC for the following compound is _____



- A) 3-Bromo-3-ethoxy-1-propene
B) 3-Bromo-3-methoxy-1-propene.
C) 4-Bromo-5-hexene.
D) 1-Bromo-1-ethoxy-2-propene.

24. What is the best reagent needed for the following reaction?



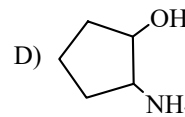
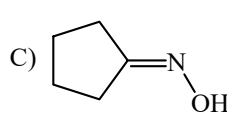
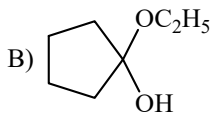
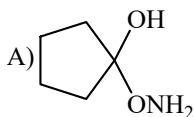
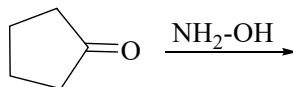
A) O_2/ Zn

B) $LiAlH_4$

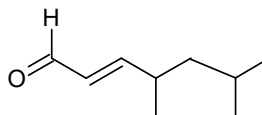
C) PCC

D) i) O_3 , ii) Zn/ H_2O

25. The product of the following reaction is _____



26. The correct IUPAC name of the following structure is _____



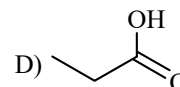
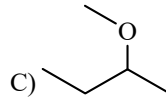
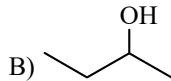
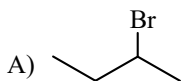
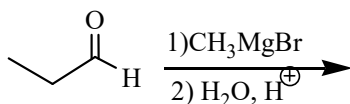
A) 2,4-Dimethyl-5-heptanal

B) 2,4-Dimethyl-7-heptenal

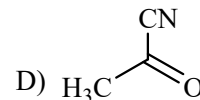
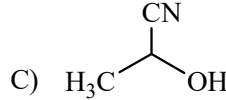
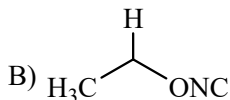
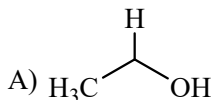
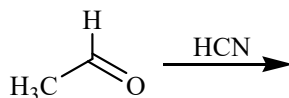
C) 5-Isopropyl-4-methyl-2-pentenal

D) 4,6-Dimethyl-2-heptenal

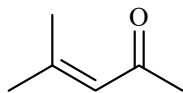
27. The product of the following reaction is _____



28. The product of the following reaction is _____



29. The correct name of the following is _____



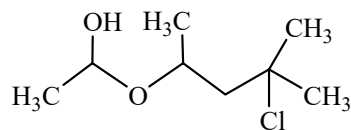
A) 2-methyl-2-penten-4-one

B) 4-methyl-3-penten-2-one

C) 1,3-dimethyl-2-pentenal

D) isopentenone

30. Which functional group is not present in the following structure?



A) Tertiary alcohol

B) Tertiary alkyl halide

C) Ether

D) Hemiacetal