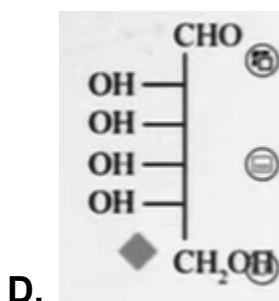
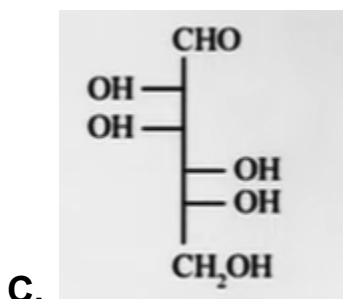
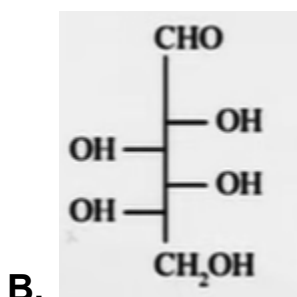
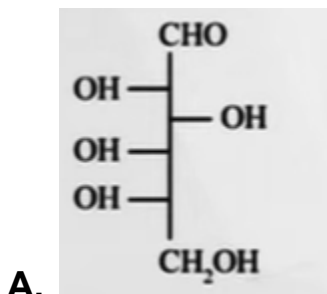


JEE Main 2024 Chemistry Question Paper

April 4 Shift 1

Ques 1. Which of the following is the correct structure of L- Glucose



Ans. B

Ques 2. Which of the following has a maximum dipole moment?

- A. NH_3**
- B. NF_3**
- C. PF_5**
- D. PCl_5**

Ans. A

Ques 3. If emf of hydrogen electrode at 25°C is zero in pure water, then pressure of H_2 in bar is?

- A. 10^{-14}**
- B. 10^{-7}**
- C. 1**
- D. 0.5**

Ans. A

Ques 4. For which of the following elements, only one oxidation state is possible?

- A. Sc**
- B. Co**
- C. Ni**
- D. Fe**

Ans. A

Ques 5. Among the following, decreasing order of basic strength will be:

OH^- , H^- , HCOO^- , CH_3COO^- , $^- \text{OR}$

(I) (II) (III) (IV) (V)

- A. $\text{II} > \text{V} > \text{III} > \text{I} > \text{IV}$
- B. $\text{II} > \text{V} > \text{I} > \text{IV} > \text{III}$
- C. $\text{III} > \text{IV} > \text{I} > \text{V} > \text{II}$
- D. $\text{V} > \text{I} > \text{IV} > \text{II} > \text{III}$

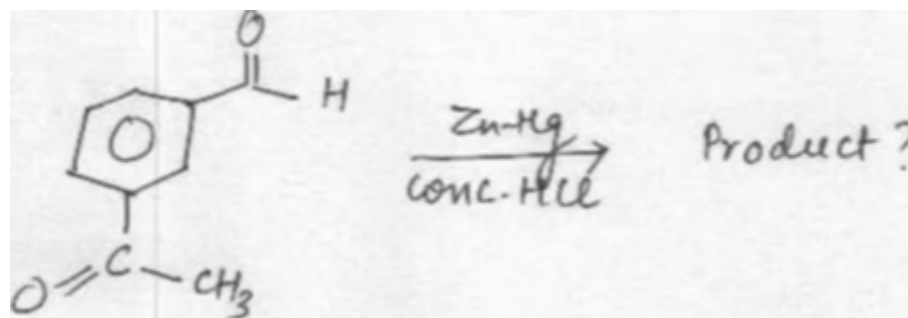
Ans. B

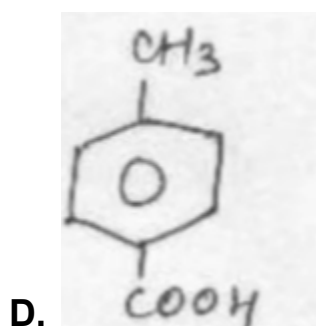
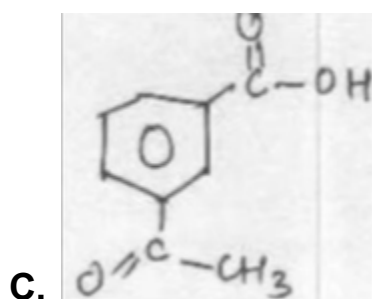
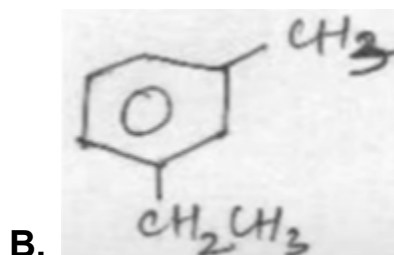
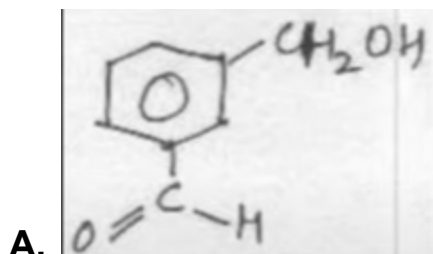
Ques 6. Which of the following is the correct order of first ionization enthalpy?

- A. $\text{Be} < \text{B} < \text{O} < \text{F} < \text{N}$
- B. $\text{B} < \text{Be} < \text{O} < \text{N} < \text{F}$
- C. $\text{B} < \text{Be} < \text{N} < \text{F} < \text{O}$
- D. $\text{Be} < \text{B} < \text{N} < \text{F} < \text{O}$

Ans. B

Ques 7.





Ans. B

Ques 8. How many of the following compounds are sp^3 hybridised



Ans. 3

Ques 9. The total number of chain isomers possible for a compound with molecular formula C_7H_{16} are:

Ans. 9

Ques 10. Statement-1: Aldol condensation is caused by acidity of a hydrogens.

Statement-2: Cross aldol is not possible between Ph-CHO and CH_3CHO

- A. Both Statement-1 and Statement-2 are correct**
- B. Both Statement-1 and Statement-2 are incorrect**
- C. Statement-1 is correct but Statement-2 is incorrect**
- D. Statement-1 is incorrect but Statement-2 is correct**

Ans. C

Ques 11. Which of the following will not give Lassaigne's test?

- A. Urea**
- B. Azobenzene**
- C. Hydrazine**
- D. Phenylhydrazine**

Ans. C

Ques 12. Among the following, species that have one unpaired electron:

- A. CN^-**
- B. O_2^{-2}**

- C. O_2^+
- D. NO^-

Ans. C

Ques 13. Decreasing order of the field strength of the following ligands will

be: CO , CN^- , Cl^- , H_2O

- A. $CO > CN^- > H_2O > Cl^-$
- B. $CO > CN^- > Cl^- > H_2O$
- C. $CN^- > CO > H_2O > Cl^-$
- D. $CN^- > CO > Cl^- > H_2O$

Ans. A