



# PAPER SOLUTION



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From Meerut

JEE  
MAIN  
2026

JAN	SHIFT
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# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. Match the following and choose the correct option.

- A** a-(i), b-(ii), c-(iii), d-(iv)
- B** a-(iv), b-(iii), c-(ii), d-(i)
- C** a-(iii), b-(ii), c-(iv), d-(i)
- D** a-(i), b-(ii), c-(iv), d-(iii)

	List-I		List-II
(a)	$[\text{Ag}(\text{NH}_3)_2]^+$	(i)	Fehling's solution
(b)	Zn-Hg/HCl	(ii)	Clemmenson's reduction
(c)	$\text{NH}_2 - \text{NH}_2/\text{KOH}$	(iii)	Tollen's reagent
(d)	$\text{Cu}^{2+}/\text{OH}^-$	(iv)	Wolff-Kishner reduction

Ans. (C)



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. Statement-I : Sucrose is dextrorotary and upon hydrolysis it becomes laevorotatory.**  
**Statement-II : Sucrose on hydrolysis gives glucose and fructose such that the laevorotation of glucose is more than dextrorotation of fructose.**

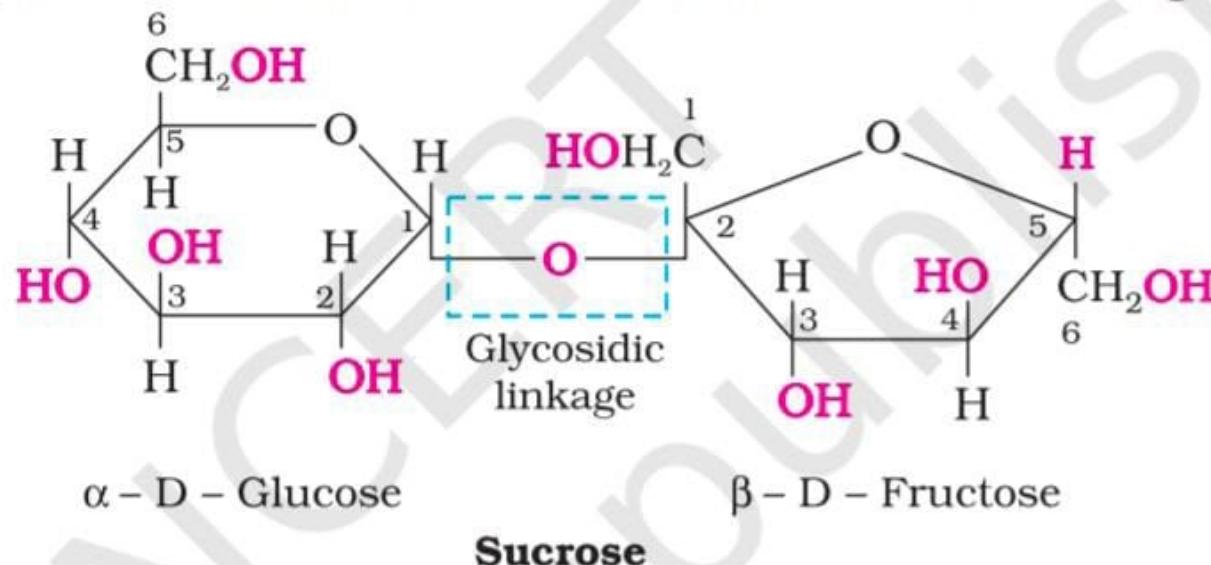
- A** Both Statement-I and Statement-II are correct
- B** Both Statement-I and Statement-II are incorrect
- C** Statement-I is correct, Statement-II is incorrect
- D** Statement-II is correct, Statement-I is incorrect

**Ans. (C)**



# JEE MAIN 2026 🔴 LIVE PAPER DISCUSSION

These two monosaccharides are held together by a glycosidic linkage between C1 of  $\alpha$ -D-glucose and C2 of  $\beta$ -D-fructose. Since the reducing groups of glucose and fructose are involved in glycosidic bond formation, sucrose is a non reducing sugar.



Sucrose is dextrorotatory but after hydrolysis gives dextrorotatory glucose and laevorotatory fructose. Since the laevorotation of fructose ( $-92.4^\circ$ ) is more than dextrorotation of glucose ( $+52.5^\circ$ ), the mixture is laevorotatory. Thus, hydrolysis of sucrose brings about a change in the sign of rotation, from dextro (+) to laevo (-) and the product is named as **invert sugar**.



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. Which of the following is the correct order of the reactivity of given nucleophiles when treated with  $\text{CH}_3\text{Br}$  in methanol?**

$\text{F}^-$ ,  $\text{I}^-$ ,  $\text{C}_2\text{H}_5\text{O}^-$ ,  $\text{C}_6\text{H}_5\text{O}^-$

- A**  $\text{I}^- > \text{C}_2\text{H}_5\text{O}^- > \text{C}_6\text{H}_5\text{O}^- > \text{F}^-$
- B**  $\text{I}^- > \text{F}^- > \text{C}_2\text{H}_5\text{O}^- > \text{C}_6\text{H}_5\text{O}^-$
- C**  $\text{I}^- > \text{C}_2\text{H}_5\text{O}^- > \text{F}^- > \text{C}_6\text{H}_5\text{O}^-$
- D**  $\text{C}_6\text{H}_5\text{O}^- > \text{F}^- > \text{I}^- > \text{C}_2\text{H}_5\text{O}^-$

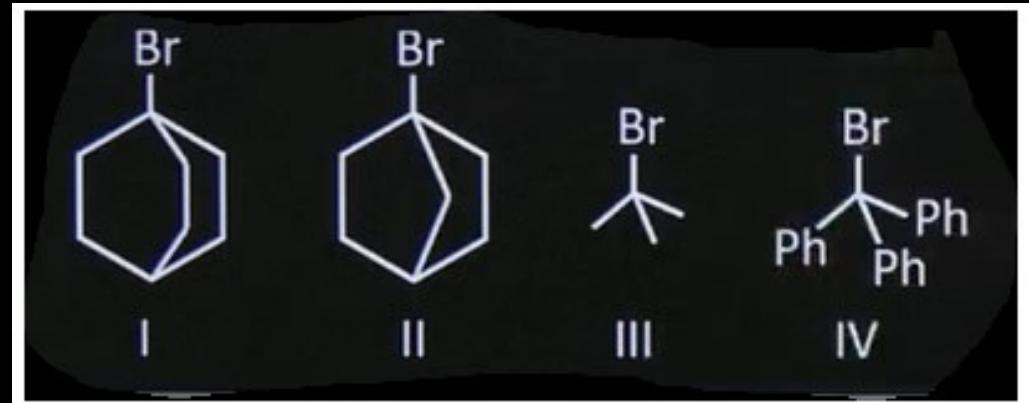
**Ans. (A)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Reactivity of following on the basis  $S_N1$  mechanism.

- A**  $IV > III > I > II$
- B**  $II > IV > III > I$
- C**  $III > IV > I > II$
- D**  $IV > III > II > I$



Ans. (A)



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. Given below are two statements.**

**Statement I : HX bond length is higher in HCl than HF.**

**Statement II : PH<sub>3</sub> have the lowest boiling point in hydride of group 15 element.**

- A** Both Statement-I and Statement-II are correct
- B** Both Statement-I and Statement-II are incorrect
- C** Statement-I is correct, Statement-II is incorrect
- D** Statement-II is correct, Statement-I is incorrect

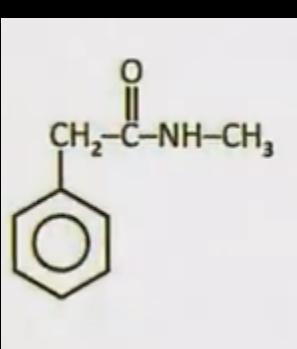
**Ans. (A)**



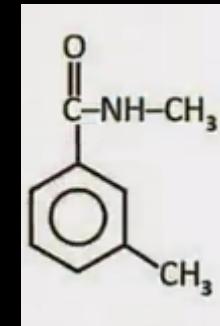
# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. A compound 'A' with molecular formula  $C_9H_{11}NO$  reacts with  $Br_2/NaOH$  at give (X). (X) on reaction with  $NaNO_2$  in dil.  $HCl$  gives compounds (Y). is treated with  $CuCN$ , followed by hydrolysis gives (Z). The compound (A) on hydrolysis also gives compound (Z). Identify compound (A)

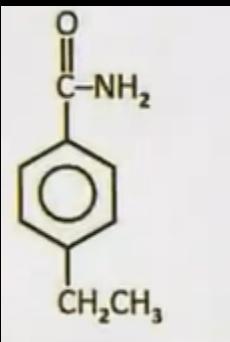
**A**



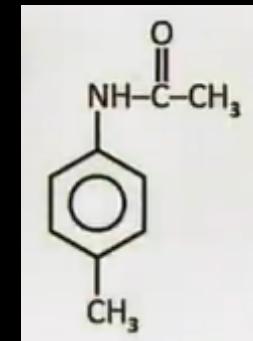
**B**



**C**



**D**



**Ans. (C)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. Which of the following statement is correct regarding the nature and directive influence of  $-NO_2$  group in nitration of benzene.**

- A** It is an activating group and ortho/para director
- B** It is a deactivating group and ortho/para director
- C** It is a deactivating group and meta director
- D** It is an activating group and meta director

**Ans. (C)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

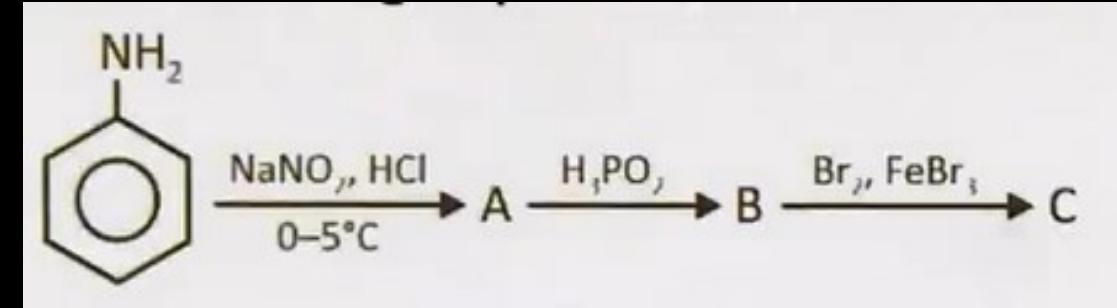
**#Q. Consider the following sequence of reaction and identify A, B and C respectively.**

**A**  $\text{C}_6\text{H}_5\text{OH}$ ,  $\text{C}_6\text{H}_6$ ,  $\text{C}_6\text{H}_4\text{Br}_2$

**B**  $\text{C}_6\text{H}_5\text{N}_2^+\text{Cl}^-$ ,  $\text{C}_6\text{H}_6$ ,  $\text{C}_6\text{H}_5\text{Br}$

**C**  $\text{C}_6\text{H}_5\text{NO}_2$ ,  $\text{C}_6\text{H}_5\text{OH}$ ,  $\text{C}_6\text{H}_5\text{Br}$

**D**  $\text{C}_6\text{H}_5\text{Cl}$ ,  $\text{C}_6\text{H}_5\text{OH}$ ,  $\text{C}_6\text{H}_6$



**Ans. (B)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. Given below are two statements**

**Statement-I :  $K_H$  is constant with change in concentration of gas till solution is dilute at given temperature.**

**Statement-II : According to Henry's Law, partial pressure of gas in vapour phase is inversely proportional to mole fraction of gas in solution.**

- A** Both Statement-I and Statement-II are correct
- B** Both Statement-I and Statement-II are incorrect
- C** Statement-I is correct, Statement-II is incorrect
- D** Statement-II is correct, Statement-I is incorrect

**Ans. (C)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

#Q. Consider a first order reaction:

$A \rightarrow \text{products}$

3 different solutions are taken rate of reaction

**Solution 1 : 100mL 10M 'A' – $r_1$**

**Solution 2 : 200mL 10M 'A' – $r_2$**

**Solution 3 : 100mL 10M 'A' + 100mL water-  $r_3$**

The correct order of the rates of reactions is,

**A**  $r_1 = r_2 = r_3$

**B**  $r_1 = r_2 < r_3$

**C**  $r_1 = r_2 > r_3$

**D**  $r_1 < r_2 = r_3$

**Ans. (C)**



# JEE MAIN 2026 PAPER DISCUSSION

**#Q. Bohr's radius of H-atom is  $2.12 \times 10^{-10}$  m. Calculate the energy at this level.**

- A**  $-5.44 \times 10^{-19}$  J
- B**  $-2.176 \times 10^{-18}$  J
- C**  $-54.4 \times 10^{-19}$  J
- D**  $-2.3 \times 10^{-19}$  J

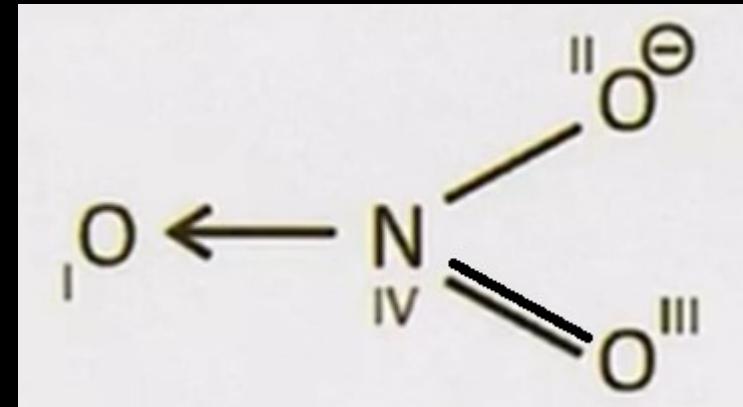
**Ans. (A)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. Find the formal charge of  $\overset{\text{IV}}{\text{N}}$  and  $\overset{\text{I}}{\text{O}}\text{, }\overset{\text{II}}{\text{O}}\text{, }\overset{\text{III}}{\text{O}}\text{.}$

- A** 0, +1, -1, +2
- B** +1, -1, -1, 0
- C** -1, 0, +2, +1
- D** +1, -1, 0, -1

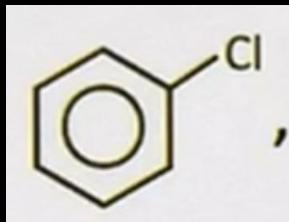


**Ans. (B)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. For 'P'



the incorrect statement is.

- A** In 'P' C-Cl bond has partial double bond character
- B** 'Cl' is an ortho-para directing group towards electrophilic aromatic substitution
- C** 'P' can undergo nucleophilic substitution reaction at normal conditions
- D** 'P' is less reactive than benzyl chloride towards nucleophilic substitution

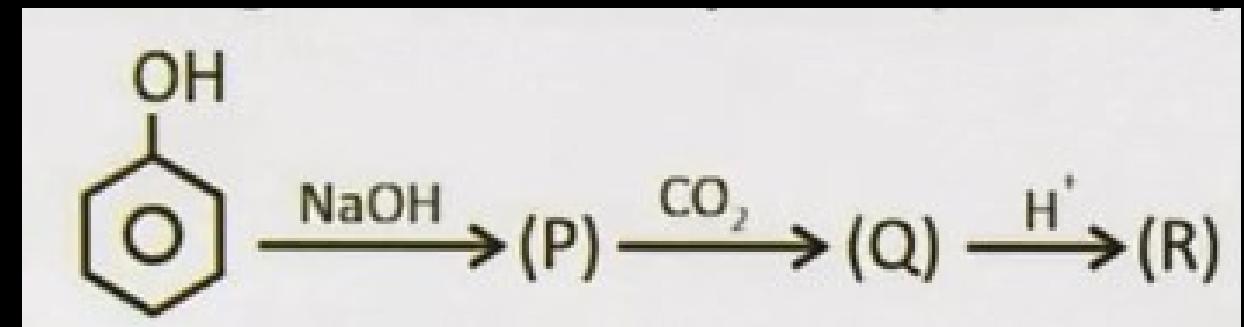
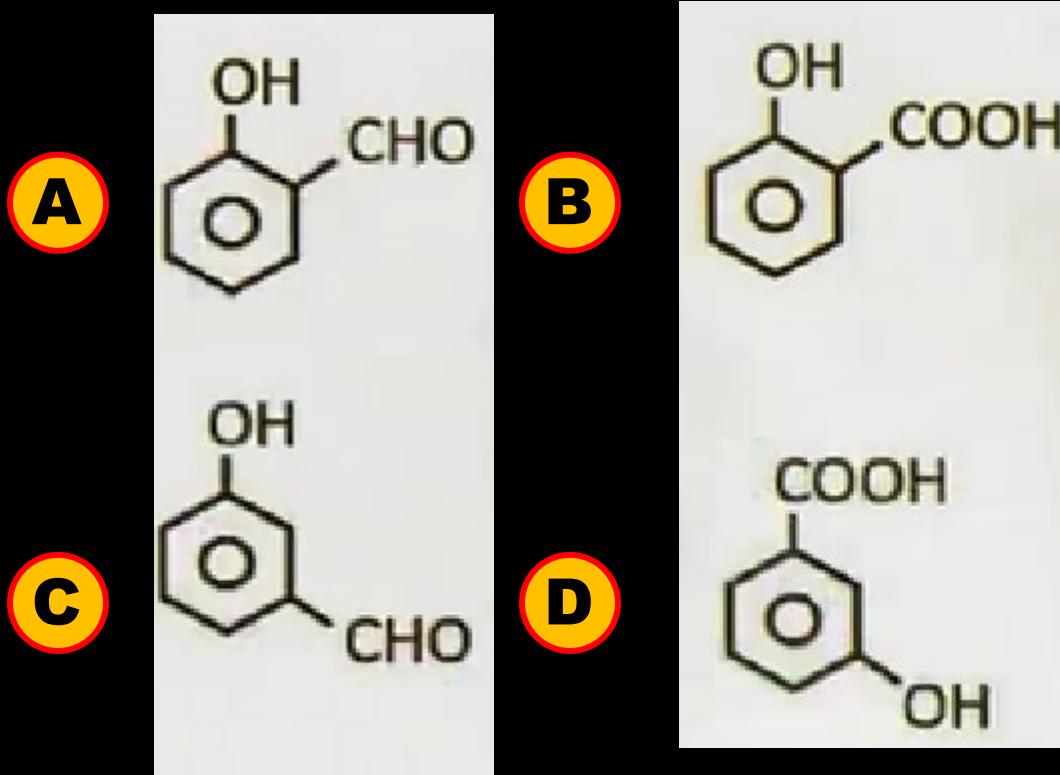
reaction.

**Ans. (D)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. In the following reaction sequence, identify compound (R).



Ans. (A)



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q. Which of the following statement is correct regarding element having atomic number 79.**

- A** It's first ionisation enthalpy is maximum in its group
- B** It's first ionisation enthalpy is minimum in its group
- C** It belongs to group 10 of periodic table
- D** It belongs to 5<sup>th</sup> period of periodic table

**Ans. (A)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

**#Q. An element from 1<sup>st</sup> transition series and another element of 3<sup>rd</sup> transition series (same group) do not liberate H<sub>2</sub> gas from dilute acids like HCl. Both form halides. The hybridisation state of metal ion halide respectively are:**

- A** Both sp<sup>3</sup>
- B** Both dsp<sup>2</sup>
- C** sp<sup>3</sup> and dsp<sup>2</sup>
- D** dsp<sup>2</sup> and sp<sup>3</sup>

**Ans. (C)**



# JEE MAIN 2026 LIVE PAPER DISCUSSION

**#Q. Sodium extract of organic compound of 0.1 g is treated with chlorin water and  $\text{CCl}_4$  which dissolves in organic solvent produce a violet colour upon treatment with  $\text{AgNO}_3$  a yellow ppt of 0.12 g is produce. Calculate the percentage of Halide in organic compound.**

**Ans. (65)**



# JEE MAIN 2026 ▶ LIVE PAPER DISCUSSION

#Q. For the reaction given below at 25°C



Find  $\ln K_p$

Given  $(\Delta G^\circ_f)_A = -50.384 \text{ KJ/mol}$

Given  $(\Delta G^\circ_f)_{S_2} = -100 \text{ KJ/mol}$

**A** 0.43

**B** 0.23

**C** 0.31

**D** 0.53

**Ans. (C)**