

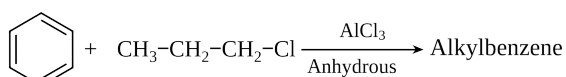
JEE MAIN HYDROCARBONS — CHEMICAL PROPERTIES OF AROMATIC HYDROCARBONS — PYQS

Max. Marks: 16

Questions: 4

Section A (MCQ) — 4 questions

- Q.1** For the following Friedel Craft's alkylation reaction, which of the statements are correct?



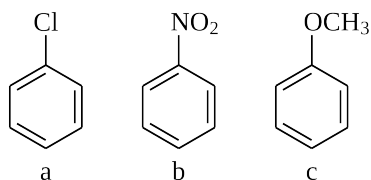
- A. Major product is n-propyl benzene.
 B. iso-propyl carbocation intermediate is also generated.
 C. Multiple substitution is inevitable.
 D. Introducing electron-donating substituent on benzene will not produce any alkyl benzene.
 Choose the correct answer from the options given below : [JEE Main 2026 (Online) 5th April Morning Shift]

- (1) A and D only (2) B and C only
 (3) A and C only (4) B and D only

Scan or tap for the full solution



- Q.2** Consider the following compounds :



Arrange these compounds in the increasing order of reactivity with nitrating mixture.

[JEE Main 2026 (Online) 23rd January Morning Shift]

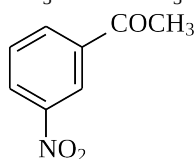
- (1) $c < b < a$ (2) $b < c < a$ (3) $c < a < b$ (4) $b < a < c$

Scan or tap for the full solution



- Q.3** Given below are two statements :

Statement-I: Benzene is nitrated to give nitrobenzene, which on further treatment with $\text{CH}_3\text{COCl}/\text{AlCl}_3$ will give



Statement-II: $-\text{NO}_2$ group is a m-directing, and deactivating group.

In the light of the above statements, choose the most appropriate answer from the options given below

[JEE Main 2026 (Online) 22nd January Morning Shift]

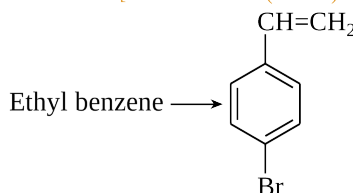
- (1) Statement-I is incorrect but Statement-II is correct
 (2) Both Statement-I and Statement-II are correct
 (3) Both Statement-I and Statement-II are incorrect
 (4) Statement-I is correct but Statement-II is incorrect

Scan or tap for the full solution



- Q.4** Choose the correct set of reagents for the following conversion.

[JEE Main 2025 (Online) 8th April Evening Shift]



- (1) $\text{Cl}_2/\text{anhy. AlCl}_3$; Br_2/Fe ; alc. KOH
 (2) Cl_2/Fe ; $\text{Br}_2/\text{anhy. AlCl}_3$; aq. KOH
 (3) Br_2/Fe ; Cl_2, Δ ; alc. KOH
 (4) $\text{Br}_2/\text{anhy. AlCl}_3$; Cl_2, Δ ; aq. KOH

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4							
Ans.	2	4	1	3							