

PYQSide

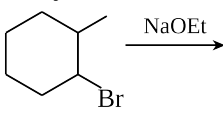
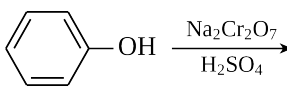
JEE MAIN HALOALKANES AND HALOARENES — ELIMINATION REACTIONS OF HALOALKANES — PYQS

Max. Marks: 16

Questions: 4

Section A (MCQ)

Q.1 The reactions which cannot be applied to prepare an alkene by elimination, are

- A.  $\xrightarrow{\text{NaOEt}}$
- B. $\text{CH}_3 - \text{CH}_2 - \underset{\text{Br}}{\text{CH}} - \text{CH}_3 \xrightarrow{\text{KOH (aq)}}$
- C. $\text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{Br} \xrightarrow{\text{NaOMe}}$
- D.  $\xrightarrow[\text{H}_2\text{SO}_4]{\text{Na}_2\text{Cr}_2\text{O}_7}$
- E. $\text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{OH} \xrightarrow[573 \text{ K}]{\text{Cu}}$

Choose the correct answer from the options given below: [JEE Main 2025 (Online) 7th April Morning Shift]

- (1) B & E Only (2) B, C & D Only
(3) A, C & D Only (4) B & D Only

Scan or tap for the full solution 

Q.2 Given below are two statements :

Statement-I: Alcohols are formed when alkyl chlorides are treated with aqueous potassium hydroxide by elimination reaction.

Statement-II: In alcoholic potassium hydroxide, alkyl chlorides form alkenes by abstracting the hydrogen from the β -carbon.

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

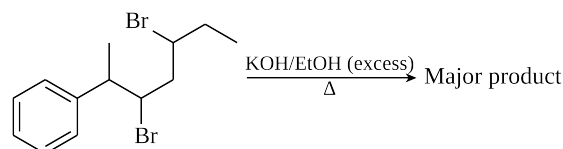
[JEE Main 2025 (Online) 4th April Evening Shift]

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

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Q.3 The major product of the following reaction is:

[JEE Main 2025 (Online) 28th January Evening Shift]



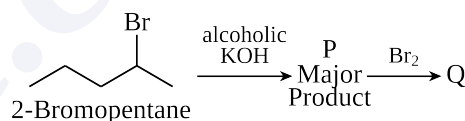
- (1) 6-Phenylhepta-3,5-diene
(2) 6-Phenylhepta-2,4-diene
(3) 2-Phenylhepta-2,4-diene
(4) 2-Phenylhepta-2,5-diene

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Section B (Numerical)

Q.4



Consider the above sequence of reactions. 151 g of 2-bromopentane is made to react. Yield of major product P is 80% whereas Q is 100%.

Mass of product Q obtained is _____ g.

(Given molar mass in g mol^{-1} H : 1, C : 12, O : 16, Br : 80) [JEE Main 2025 (Online) 2nd April Evening Shift]

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ANSWER KEY

Section A (MCQ)

Ques.	1	2	3							
Ans.	4	3	3							

Section B (Numerical)

Ques.	4							
Ans.	184							