

# Alcohols, Phenols and Ethers

NEET previous year questions · Chemistry

3 questions from the official papers: NEET 2026 (2), NEET 2020 (1). Each is followed by its answer and a worked solution written by BrainIt. Generated on 23 October 2026.



## BrainIt

The NEET practice app that learns how you practise and tells you what to do next.

PYQs · Mock tests · Revision · Interactive 3D concepts · Analytics

Get it on  
Google Play

Download on the  
App Store



brainit.pro/app

### 1. NEET 2026 · Q65

Match List-I (conversions) with List-II (reagents/conditions) and choose the correct answer from the options given below:

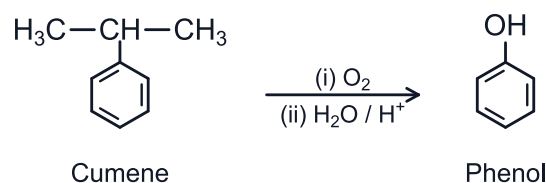
| List I                                                                                                       | List II                                                                                 |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| a)                                                                                                           | i) (i) Oleum; (ii) NaOH, Δ; (iii) H <sup>+</sup>                                        |
| b) CH <sub>3</sub> COOH → CH <sub>3</sub> CH <sub>2</sub> OH                                                 | ii) (i) O <sub>2</sub> ; (ii) H <sub>2</sub> O/H <sup>+</sup>                           |
| c) CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> OH → propan-2-ol (CH <sub>3</sub> CH(OH)CH <sub>3</sub> ) | iii) (i) CH <sub>3</sub> OH, H <sup>+</sup> ; (ii) H <sub>2</sub> , catalyst            |
| d)                                                                                                           | iv) (i) conc. H <sub>2</sub> SO <sub>4</sub> , Δ; (ii) H <sup>+</sup> /H <sub>2</sub> O |

- (1) A-II, B-III, C-I, D-IV    (2) A-II, B-III, C-IV, D-I  
(3) A-II, B-IV, C-III, D-I    (4) A-I, B-III, C-IV, D-II

#### Answer (2)

**Sol.** Cumene gives phenol by air oxidation (O<sub>2</sub>) to cumene hydroperoxide then acid hydrolysis (H<sub>2</sub>O/H<sup>+</sup>), so A-II. Acetic acid is converted to ethanol by esterification (CH<sub>3</sub>OH/H<sup>+</sup>) followed by reduction (H<sub>2</sub>/catalyst), so B-III. Propan-1-ol is dehydrated (conc. H<sub>2</sub>SO<sub>4</sub>, heat) to propene, which on Markovnikov hydration (H<sup>+</sup>/H<sub>2</sub>O) gives propan-2-ol, so C-IV. Benzene is converted to phenol by

sulphonation (oleum), NaOH fusion, then acidification, so D-I. Hence A-II, B-III, C-IV, D-I.



### 2. NEET 2026 · Q69

The functional group that can be identified through phthalein dye test is:

- (1) Aldehyde                      (2) Phenolic  
(3) Carboxylic acid              (4) Alcohol

#### Answer (2)

**Sol.** In the phthalein dye test a phenol is heated with phthalic anhydride and concentrated H<sub>2</sub>SO<sub>4</sub> to form phenolphthalein, which turns pink on addition of NaOH; this confirms a phenolic -OH group. Aldehydes are detected by Tollens'/Fehling's tests, carboxylic acids by effervescence with NaHCO<sub>3</sub>, and alcohols by the ceric ammonium nitrate or Lucas tests.

### 3. NEET 2020 · Q132

Anisole on cleavage with HI gives

- (1) + CH<sub>3</sub>OH              (2) + C<sub>2</sub>H<sub>5</sub>I  
(3) + C<sub>2</sub>H<sub>5</sub>OH              (4) + CH<sub>3</sub>I

#### Answer (4)

**Sol.** HI protonates anisole at oxygen, then  $I^-$  attacks the methyl group by substitution nucleophilic bimolecular ( $S_N2$ ) cleavage. The products are phenol and methyl iodide ( $CH_3I$ ); the aryl C-O bond is not cleaved by  $S_N2$ . Chapter: Alcohols, Phenols and Ethers.

Why the other options are wrong:

- (1) Iodobenzene and  $CH_3OH$ : this needs  $I^-$  to attack the ring carbon, but  $S_N2$  cannot occur at an  $sp^2$  aryl carbon, so the aryl C-O bond stays intact.
- (2) Phenol and  $C_2H_5I$ : anisole is a methyl ether, so the alkyl iodide formed is  $CH_3I$ ; ethyl iodide would come from phenetole.
- (3) Iodobenzene and  $C_2H_5OH$ : the aryl C-O bond is not broken, and anisole has no ethyl group to give ethanol.

---

Questions: official NEET papers set by NTA. Solutions: BrainIt. BrainIt is independent and not affiliated with NTA. Online, with every chapter: [brainit.pro/neet/chemistry/alcohols-phenols-and-ethers/pyq/](https://brainit.pro/neet/chemistry/alcohols-phenols-and-ethers/pyq/)

#### AFTER THIS PAPER

## Turn this paper into a plan.

BrainIt is a NEET practice app. It learns how you practise and tells you what to do next.

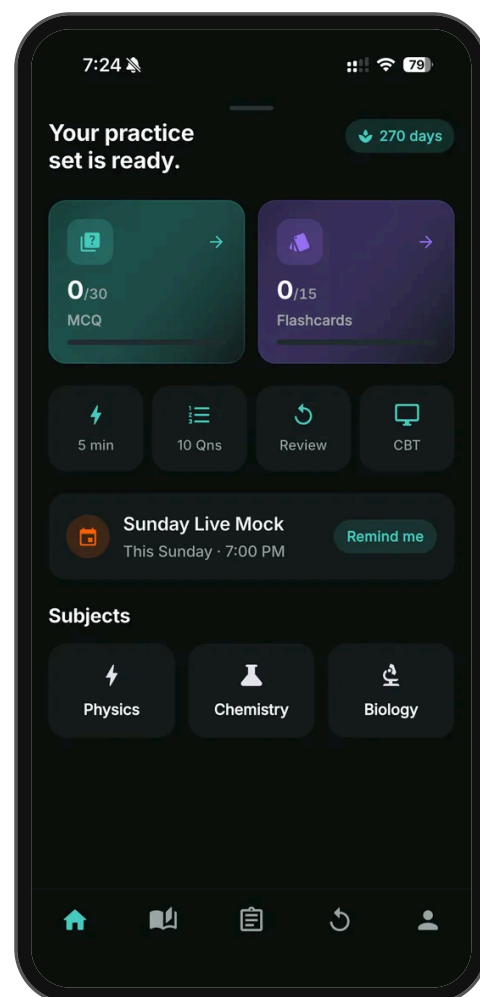
- **PYQs**  
Previous-year questions, each with an explanation.
- **Mock tests**  
Full and mini mocks on the CBT exam screen.
- **Revision**  
Your mistakes come back for review, with flashcards.
- **Interactive concepts**  
Learn by exploring 3D models, like the human body and the heart.
- **Analytics**  
See your accuracy, speed and where you lose marks.
- **A daily plan**  
It picks what to study next, every day.

Get it on  
**Google Play**

Download on the  
**App Store**



Scan with your phone camera,  
or type **brainit.pro/app**



**Take a free CBT mock**

Real NEET questions on the exam screen, timed and marked for you.  
No login.