



CBSE NCERT Based Chapter wise Questions (2025-2026)

Class-XII

Subject: CHEMISTRY

Chapter Name : Alcohol, Phenol & Ether (Chap : 7)

Total : 6 Marks (expected) [MCQ(1)-1 Mark, AR(1)-1 Mark VSA-(1)-1 Marks, SA(1)-3 Marks]

Level - 2 (Higher Order)

MCQ Type :

1. Match the reagents required for the given reactions :

	Column-I		Column-II
I.	Oxidation of primary alcohols to aldehydes	(p)	NaBH_4
II.	Butan-2-one to butan-2-ol	(q)	85% phosphoric acid at 440 K
III.	Bromination of phenol to 2, 4, 6 tribromophenol	(r)	P. C. C
IV.	Dehydration of propane	(s)	Bromine water

(A) I - (r), II - (p), (III) - (s), (IV) - (q)

(B) I - (q), II - (r), (III) - (p), (IV) - (s)

(C) I - (s), II - (q), (III) - (p), (IV) - (r)

(D) I - (p), II - (s), (III) - (r), (IV) - (q)

(Hints : CBSE 2023)

2. Which of the following alcohols will not undergo oxidation ?

(A) Butane

(B) Butan-2-ol

(C) 2-methyl butan-2-ol

(D) 3-methyl butan-2-ol

(Hints : CBSE 2023)

3. For conversion of propene into 1-propanol, which of the following reagents and conditions should be used ?

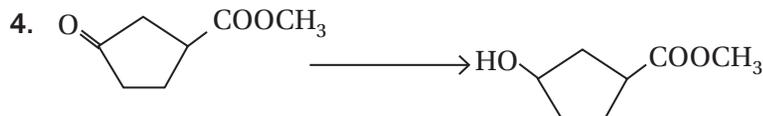
(A) Cone. H_2SO_4 , H_2O & heat

(B) B_2H_6 ; H_2O_2 / OH

(C) Dilute H_2SO_4

(D) H_2O / H^+

(Hints : CBSE 2023)



Which of the following reagents should be used to carry out of the above conversion ?

(A) LiAlH_4

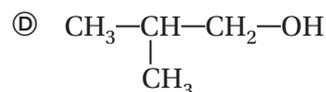
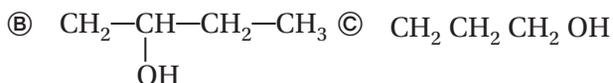
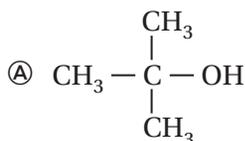
(B) NaBH_4

(C) Zn-Hg/HCl

(D) KMnO_4

(Hints : CBSE 2021-22 - (Term-1))

5. Lucas reagent produces cloudiness immediately with :



(Hints : CBSE 2021-22 - (Term-1))

(II) Assertion and Reason Questions. (Q. 6 – 8) :

Directions: Read the following questions and choose any one of the following four responses.

- Assertion and Reason both are correct and Reason is the correct explanation of Assertion.
- Assertion and Reason both are correct and Reason is not the correct explanation of Assertion.
- Assertion is correct but Reason is wrong.
- Assertion is wrong but Reason is correct.

6. **Assertion (A) :** Alcohols react both as nucleophiles and electrophiles.

Reason (R) : The bond between C-O is broken when alcohols react as nucleophiles.

- Ⓐ a Ⓑ b Ⓒ c Ⓓ d

(Hints : CBSE, SQP 2024)

7. **Assertion (A) :** C_2H_5OH is a weaker base than phenol but is a stronger nucleophile than phenol.

Reason (R) : In phenol, the lone pair of electrons on oxygen is withdrawn towards the ring due to resonance.

- Ⓐ a Ⓑ b Ⓒ c Ⓓ d

(Hints : CBSE, SQP 2024)

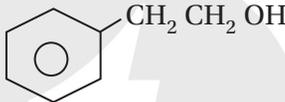
8. **Assertion (A) :** p-methoxyphenol is a stronger acid than m-methoxyphenol.

Reason (R) : Methoxy group exerts +R effect at both ortho and para position.

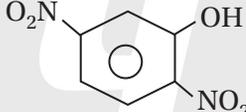
- Ⓐ a Ⓑ b Ⓒ c Ⓓ d

(Hints : CBSE, 2024)

Very Short Answer (VSA) :

9. Write IUPAC name of the given compound : 

(Hints : All India 2016)

10. Write IUPAC name of the given compound : 

Short Answer (VSA) :

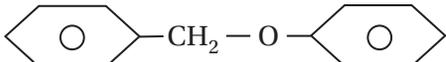
11. How is toluene obtained from phenol ?

(Hints : Delhi 2013 C)

12. Give structures of final products expected from the following reactions :

(i) Hydroboration of propene followed by oxidation with H_2O_2 in alkaline medium.

(ii) Dehydration of $(CH_3)_3C.OH$ by heating it with 20% H_3PO_4 at 358 K.

(iii) Heating of  with HI.

(Hints : Delhi 2020)

13. How can you convert the following ?

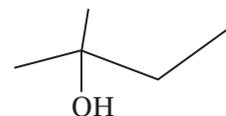
(i) Phenol to O-hydroxybenzaldehyde

(ii) Methanal to ethanol

(iii) Phenol to phenyl ethanoate

(Hints : Delhi 2020)

14. (i) How will you synthesise the following alcohol from appropriate alkene ?



(Hints : a)

15. An alcohol A (C_4H_8O) on oxidation with acidified potassium dichromate gives acid B ($C_4H_8O_2$). Compound A when dehydrated with cone. H_2SO_4 at 443 K gives compound C. Treatment of 'C' with aqueous H_2SO_4 gives compound D ($C_4H_{10}O$) which is an isomer of 'A'.

Compound 'D' is resistant to oxidation but compound A can be easily oxidised. Identify A, B, C and D. Name the type of isomerism exhibited by A & D.

(Hints : CBSE SQP 2019)

ANSWER

16. (A)

17. (C)

18. (B)

19. (B)

20. (A)

21. (C)

22. (D)

23. (D)

