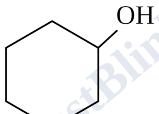
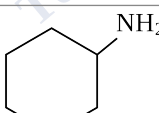
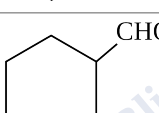
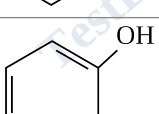


JEE MAIN PRINCIPLES RELATED TO PRACTICAL CHEMISTRY — DETECTION OF FUNCTIONAL GROUPS — PYQS

Max. Marks: 16
Questions: 4

Section A (MCQ) — 4 questions

Q.1 Match the **LIST-I** with **LIST-II**

List-I Compound		List-II Test	
A.		I.	Hinsberg's reagent test
B.		II.	Phthalein dye test
C.		III.	Lucas test
D.		IV.	Tollen's test

Choose the correct answer from the options given below: [JEE Main 2026 (Online) 4th April Evening Shift]

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

Scan or tap for the full solution


Q.2 Match **List - I** with **List - II**.

[JEE Main 2026 (Online) 2nd April Morning Shift]

Mixture of Compounds		Reagent used to distinguish	
A.	Diethyl amine + Ethyl amine	I.	Bromine water
B.	Acetaldehyde + Acetone	II.	$\text{CHCl}_3 + \text{KOH}, \Delta$
C.	Ethanol + Phenol	III.	Neutral FeCl_3
D.	Benzoic acid + Cinnamic acid	IV.	Ammoniacal silver nitrate

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

Scan or tap for the full solution


Q.3 Match **List - I** with **List - II**.

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

Functional group (detection)		Change observed during detection	
A.	Unsaturation (Baeyer's test)	I.	Red colour appears
B.	Alcoholic group (Ceric ammonium nitrate test)	II.	Silver mirror appears
C.	Aldehyde group (Tollens' reagent)	III.	Violet colour appears
D.	Phenolic group (FeCl_3 test)	IV.	Discharge of pink colour

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

Scan or tap for the full solution


Q.4 Match the **LIST-I** with **LIST-II**

LIST-I (Reagent)		LIST-II (Functional Group detected)	
A.	Sodium bicarbonate solution	I.	double bond/unsaturation
B.	Neutral ferric chloride	II.	carboxylic acid
C.	Ceric ammonium nitrate	III.	phenolic -OH
D.	Alkaline KMnO_4	IV.	alcoholic -OH

Choose the correct answer from the options given below: [JEE Main 2025 (Online) 8th April Evening Shift]

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

Scan or tap for the full solution



ANSWER KEY

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