

PART 1 - CHEMISTRY

Topic : Aldehydes, ketones and carboxylic acids

SECTION-A : (Maximum Marks : 4)

This section contains **ONE** question.

Each question has **TWO** lists: **List-I** and **List-II**.

Four options are given representing matching of elements from List-I and List-II. **ONLY ONE** of these four options corresponds to a correct matching.

For each question, choose the option corresponding to the correct answer.

Answer to each question will be evaluated according to the following marking scheme :

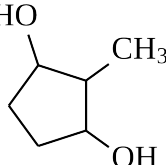
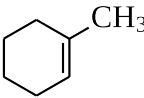
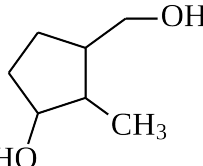
Full Marks : +4 If **ONLY** the correct option is chosen;

Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

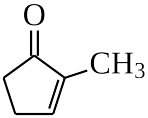
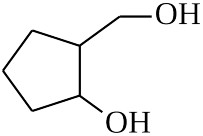
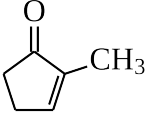
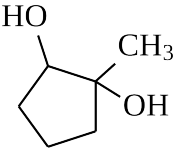
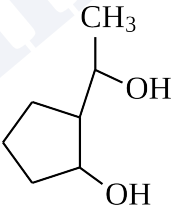
Negative Marks : -1 In all other cases.

1. **List-I** contains various reaction sequences and **List-II** contains the possible products. Match each entry in **List-I** with the appropriate entry in **List-II** and choose the correct option.

[JEE Advanced 2024 Paper 1]

List-I		List-II	
P.	 i) O_3 , Zn ii) aq. NaOH, Δ iii) ethylene glycol, PTSA —————→ iv) a) BH_3 , b) H_2O_2 , NaOH v) H_3O^+ vi) NaBH_4	1.	
Q.	 i) O_3 , Zn ii) aq. NaOH, Δ —————→ iii) ethylene glycol, PTSA iv) a) BH_3 , b) H_2O_2 , NaOH v) H_3O^+ vi) NaBH_4	2.	

Space for Rough Work

List-I		List-II	
R.	 i) ethylene glycol, PTSA → ii) a) $\text{Hg}(\text{OAc})_2$, H_2O , b) NaBH_4 iii) H_3O^+ iv) NaBH_4	3.	
S.	 i) ethylene glycol, PTSA → ii) a) BH_3 , b) H_2O_2 , NaOH iii) H_3O^+ iv) NaBH_4	4.	
		5.	

(A) P-3, Q-5, R-4, S-1 (B) P-3, Q-2, R-4, S-1 (C) P-3, Q-5, R-1, S-4 (D) P-5, Q-2, R-4, S-1

Scan or tap for the full solution



Space for Rough Work

JEE ADVANCED ALDEHYDES, KETONES AND CARBOXYLIC ACIDS — OZONOLYSIS, ALDOL, PROTECTION AND HYDRATION — PYQS

Test Pattern : **JEE (Advanced)**

ANSWER KEY

SECTION-A

[illegible]