

PART 1 - CHEMISTRY

Topic : Aldehydes, ketones and carboxylic acids

SECTION-1 : (Maximum Marks : 4)

- This section contains **ONE** question.
- The answer to each question is a **NON-NEGATIVE INTEGER**.
- For each question, enter the correct integer corresponding to the answer in the place designated to enter the answer.
- Answer to each question will be evaluated according to the following marking scheme :

Full Marks : +4 If ONLY the correct answer is entered;

Zero Marks : 0 In all other cases.

1. Complete reaction of acetaldehyde with excess formaldehyde, upon heating with conc. NaOH solution, gives P and Q. Compound P does not give Tollens' test, whereas Q on acidification gives positive Tollens' test. Treatment of P with excess cyclohexanone in the presence of catalytic amount of p-toluenesulfonic acid (PTSA) gives product R.

Sum of the number of methylene groups ($-\text{CH}_2-$) and oxygen atoms in R is _____.

[JEE Advanced 2024 Paper 1]

Scan or tap for the
full solution

Space for Rough Work

Test Pattern : **JEE (Advanced)**

SECTION-1

[illegible]