

PART 1 - CHEMISTRY

Topic : Aldehydes, ketones and carboxylic acids, Polymers

SECTION-B : (Maximum Marks : 8)

This section contains **ONE** paragraph.

Based on each paragraph, there are **TWO** questions.

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.

Paragraph for Questions 1 and 2

An organic compound P with molecular formula $C_9H_{18}O_2$ decolorizes bromine water and also shows positive iodoform test. P on ozonolysis followed by treatment with H_2O_2 gives Q and R. While compound Q shows positive iodoform test, compound R does not give positive iodoform test. Q and R on oxidation with pyridinium chlorochromate (PCC) followed by heating give S and T, respectively. Both S and T show positive iodoform test.

Complete copolymerization of 500 moles of Q and 500 moles of R gives one mole of a single acyclic copolymer U.

[Given, atomic mass: H = 1, C = 12, O = 16]

1. Sum of number of oxygen atoms in S and T is ____.

[JEE Advanced 2024 Paper 2]

Scan or tap for the
full solution



2. The molecular weight of U is ____.

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Scan or tap for the
full solution



Space for Rough Work

JEE ADVANCED ALDEHYDES, KETONES AND CARBOXYLIC ACIDS — STRUCTURE ELUCIDATION – OZONOLYSIS, B-KETO ACID DECARBOXYLATION — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-B

Ques.	1	2																	
Ans.	2	93018																	