

PART 1 - CHEMISTRY

Topic : States of matter

SECTION-A : (Maximum Marks : 4)

This section contains **ONE** question.

Each question has **FOUR** options (A), (B), (C) and (D). **ONLY ONE** of these four options is the correct answer.

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. A closed vessel contains 10 g of an ideal gas X at 300 K, which exerts 2 atm pressure. At the same temperature, 80 g of another ideal gas Y is added to it and the pressure becomes 6 atm. The ratio of root mean square velocities of X and Y at 300 K is

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(A) $2\sqrt{2} : \sqrt{3}$

(B) $2\sqrt{2} : 1$

(C) 1:2

(D) 2:1

Scan or tap for the
full solution



Space for Rough Work

JEE ADVANCED STATES OF MATTER — DALTON'S LAW AND RMS SPEED — PYQS

Test Pattern : **JEE (Advanced)**

ANSWER KEY

SECTION-A

[illegible]