

PART 1 - PHYSICS

Topic : Thermal properties of matter

SECTION-B : (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. The specific heat capacity of a substance is temperature dependent and is given by the formula $C = kT$, where k is a constant of suitable dimensions in SI units, and T is the absolute temperature. If the heat required to raise the temperature of 1 kg of the substance from -73°C to 27°C is nk , the value of n is _____.

[Given: $0^\circ\text{K} = -273^\circ\text{C}$.]

[JEE Advanced 2024 Paper 1]

Scan or tap for the
full solution

Space for Rough Work

**JEE ADVANCED THERMAL PROPERTIES OF MATTER —
SPECIFIC HEAT CAPACITY AND CALORIMETRY — PYQS**

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-B

Ques.	1																			
Ans.	25000																			