

PART 1 - PHYSICS

Topic : Work, energy and power

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 :

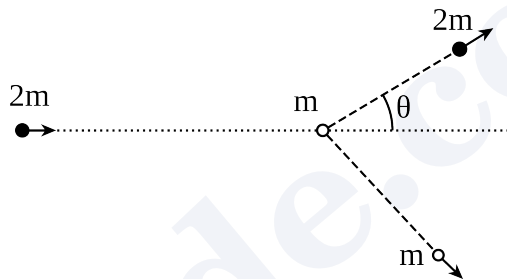
Full Marks : +4 If **ONLY** the correct option is chosen;

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

Negative Marks : -1 In all other cases.

1. In a scattering experiment, a particle of mass $2m$ collides with another particle of mass m , which is initially at rest. Assuming the collision to be perfectly elastic, the maximum angular deviation θ of the heavier particle, as shown in the figure, in radians is:

[JEE Advanced 2025 Paper 1]

(A) π (B) $\tan^{-1}\left(\frac{1}{2}\right)$ (C) $\frac{\pi}{3}$ (D) $\frac{\pi}{6}$

Scan or tap for the
full solution



Space for Rough Work

JEE ADVANCED WORK, ENERGY AND POWER — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-A																					
Ques.	1																				
Ans.	D																				