

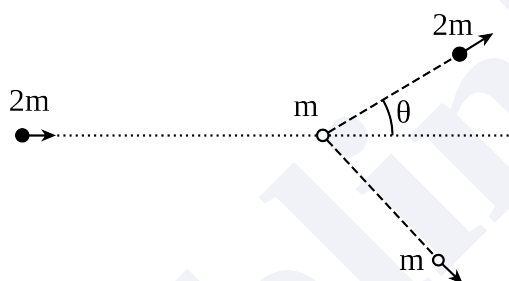
PART 1 - PHYSICS

Topic : Work, energy and power

SECTION-1 : (Maximum Marks : 3)

- 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 : +3 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-1																									
Ques.	1																								
Ans.	D																								

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