PART 1 - PHYSICS

Topic : Laws of motion

SECTION–1 : (Maximum Marks : 4)

- This section contains **ONE** question.
- The answer to each question is a **NUMERICAL VALUE**.
- For each question, enter the correct numerical value of the answer (in decimal notation, truncated / rounded-off to the **SECOND DECIMAL PLACE**; e.g. 6.25, 7.00, −0.33, −.30, 30.27, −127.30) 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. A projectile of mass 200 g is launched in a viscous medium at an angle 60° with the horizontal, with an initial velocity of 270 m/s. It experiences a viscous drag force $\vec{F} = -c\vec{v}$ where the drag coefficient c = 0.1 kg/s and $\vec{v}$ is the instantaneous velocity of the projectile. The projectile hits a vertical wall after 2 s. Taking e = 2.7, the horizontal distance of the wall from the point of projection (in m) is ____

[JEE Advanced 2025 Paper 2]

Scan or tap for the full solution

Space for Rough Work

JEE ADVANCED LAWS OF MOTION — NEWTON'S SECOND LAW AND MOMENTUM — PYQS

Test Pattern : **JEE (Advanced)**

ANSWER KEY

SECTION–1													
Ques.	1												
Ans.	**167 to 171**												