

PART 1 - PHYSICS

Topic : System of particles and rotational motion

SECTION-A : (Maximum Marks : 4)

This section contains **ONE** question.

Each question has **TWO** lists: **List-I** and **List-II**.

Four options are given representing matching of elements from List-I and List-II. **ONLY ONE** of these four options corresponds to a correct matching.

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;

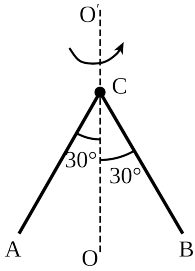
Zero Marks : 0 If none of the options is chosen (i.e. the question is unanswered);

Negative Marks : -1 In all other cases.

1. **List-I** shows four planar structures made of uniform solid rods each of mass m and length l . In the **List-II** the possible moment of inertia of these structures about an axis OCO' , which lies in the plane of the structures, are given.

List-I		List-II	
P.		1.	$\frac{5}{4}ml^2$
Q.		2.	$\frac{1}{6}ml^2$
R.		3.	$\frac{1}{12}ml^2$

Space for Rough Work

List-I		List-II	
S.		4.	$\frac{2}{3}ml^2$
		5.	$\frac{1}{3}ml^2$

Choose the option that describes the correct match between the entries in List-I to those in List-II. [JEE Advanced 2026 Paper 1]

(A) P→5, Q→1, R→4, S→2

(B) P→1, Q→3, R→4, S→2

(C) P→5, Q→3, R→2, S→1

(D) P→5, Q→4, R→2, S→1

Scan or tap for the full solution



Space for Rough Work

JEE ADVANCED SYSTEM OF PARTICLES AND
ROTATIONAL MOTION — MOMENT OF INERTIA AND
RADIUS OF GYRATION — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-A																									
Ques.	1																								
Ans.	A																								