

PART 1 - PHYSICS

Topic : Electromagnetic induction

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);

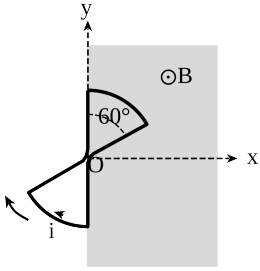
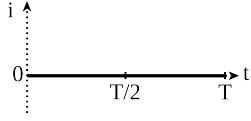
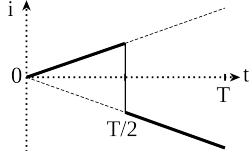
Negative Marks : -1 In all other cases.

1. **List-I** contains four conducting loops lying in the XY plane, as shown in the figures. The loops are rotating about Z axis passing through the point O with time period T in clockwise direction. The region $x > 0$ contains a uniform magnetic field B in the +z direction. **List-II** contains the qualitative variation of the induced current $i(t)$ for each of these loops. Choose the option which describes the correct match between the entries in **List-I** to those in **List-II**.

[JEE Advanced 2026 Paper 1]

List-I		List-II	
P.		1.	
Q.		2.	
R.		3.	

Space for Rough Work

List-I		List-II	
S.		4.	
		5.	

(A) $P \rightarrow 5, Q \rightarrow 4, R \rightarrow 1, S \rightarrow 3$

(C) $P \rightarrow 3, Q \rightarrow 2, R \rightarrow 1, S \rightarrow 4$

(B) $P \rightarrow 3, Q \rightarrow 2, R \rightarrow 5, S \rightarrow 4$

(D) $P \rightarrow 5, Q \rightarrow 1, R \rightarrow 2, S \rightarrow 3$

Scan or tap for the full solution



Space for Rough Work

JEE ADVANCED ELECTROMAGNETIC INDUCTION —
FARADAY'S LAWS OF INDUCTION — PYQS

Test Pattern : JEE (Advanced)

ANSWER KEY

SECTION-A																									
Ques.	1																								
Ans.	C																								