

NEET MOTION IN A PLANE — SCALARS AND VECTORS, ADDITION AND SUBTRACTION OF VECTORS — PYQS

Max. Marks: 20

Questions: 5

Section A (MCQ) — 5 questions

- Q.1** If the magnitude of sum of two vectors is equal to the magnitude of difference of the two vectors, the angle between these vectors is [NEET 2016 (Phase 1)]
 (1) 45° (2) 180° (3) 0° (4) 90°

Scan or tap for the full solution

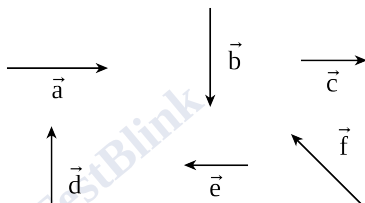


- Q.2** A body is moving with velocity 30 m/s towards east. After 10 seconds its velocity becomes 40 m/s towards north. The average acceleration of the body is [AIPMT 2011 (Prelims)]
 (1) 1 m/s^2 (2) 7 m/s^2
 (3) $\sqrt{7} \text{ m/s}^2$ (4) 5 m/s^2

Scan or tap for the full solution



- Q.3** Six vectors, $\vec{a}$ through $\vec{f}$ have the magnitudes and directions indicated in the figure. Which of the following statements is true? [AIPMT 2010 (Prelims)]



- (1) $\vec{b} + \vec{c} = \vec{f}$ (2) $\vec{d} + \vec{c} = \vec{f}$
 (3) $\vec{d} + \vec{e} = \vec{f}$ (4) $\vec{b} + \vec{e} = \vec{f}$

Scan or tap for the full solution



- Q.4** The vectors $\vec{A}$ and $\vec{B}$ are such that $|\vec{A} + \vec{B}| = |\vec{A} - \vec{B}|$. The angle between the two vectors is [AIPMT 2006]
 (1) 45° (2) 90° (3) 60° (4) 75°

Scan or tap for the full solution



- Q.5** If $|\vec{A} + \vec{B}| = |\vec{A}| + |\vec{B}|$, then angle between $\vec{A}$ and $\vec{B}$ will be [AIPMT 2001]
 (1) 90° (2) 120° (3) 0° (4) 60°

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5						
Ans.	4	4	3	2	3						