



DPP - 1

- Q 1. Two vectors are said to be equal only if they have:
(a) Same magnitude and same direction (b) Same magnitude and opposite direction
(c) Same magnitude only (d) Same direction only
- Q 2. Vectors shown in figure are:
(a) Parallel vector (b) Antiparallel vector
(c) Equal vector (d) None of these
- Q 3. Find angle between vectors \vec{A} & \vec{B} :
(a) 150° (b) 120° (c) 60° (d) 30°
- Q 4. Vectors \vec{A} , \vec{B} & \vec{C} forms an equilateral triangle. Then angles between them are:
(a) $60^\circ, 60^\circ, 60^\circ$ (b) $60^\circ, 120^\circ, 60^\circ$
(c) $120^\circ, 120^\circ, 120^\circ$ (d) None of these
- Q 5. Two vectors have magnitudes 6 and 8 units respectively. Find the magnitude of the resultant vector if the angle between vectors is 60° :
(a) 10 unit (b) $2\sqrt{13}$ unit
(c) $2\sqrt{37}$ unit (d) $2\sqrt{2}$ unit
- Q 6. Given that $\vec{A} + \vec{B} + \vec{C} = 0$. Out of three vectors, two are equal in magnitude and the magnitude of third vector is $\sqrt{2}$ times that of either of the two having equal magnitude. Then, the angles between the vectors are given by.
(a) $30^\circ, 60^\circ, 90^\circ$ (b) $45^\circ, 45^\circ, 90^\circ$
(c) $45^\circ, 60^\circ, 90^\circ$ (d) $90^\circ, 135^\circ, 135^\circ$
- Q 7. Two non-zero vectors \vec{A} and \vec{B} are drawn from a common point and $\vec{C} = \vec{A} + \vec{B}$, then which of the option incorrect regarding the angle between \vec{A} and \vec{B}
(a) 90° if $C^2 = A^2 + B^2$ (b) Greater than 90° if $C^2 < A^2 + B^2$
(c) Greater than 90° if $C^2 > A^2 + B^2$ (d) Less than 90° if $C^2 > A^2 + B^2$
- Q 8. A vector **a** makes 30° , and vector **b** makes 120° angle with the x-axis. The magnitude of these vectors are 3 unit and 4 unit, respectively. The magnitude of resultant vector is:
(a) 5 unit (b) 4 unit
(c) 3 unit (d) 7 unit
- Q 9. Two Vectors having equal magnitude of 5 units, have an angle of 60° between them. Find the magnitude of their resultant vector and its angle α from one of the vectors:
(a) 8.66 unit, 90° (b) 8.66 unit, 30°
(c) 16.8 unit, 30° (d) 8.66 unit, 45°
- Q 10. A force of 6 N and another of 8 N can be applied together to produce the effect of a single force of:
(a) 1 N (b) 11 N (c) 15 N (d) 20 N



Answer Key

Q.1 a	Q.2 b	Q.3 d	Q.4 c	Q.5 c
Q.6 d	Q.7 c	Q.8 a	Q.9 b	Q.10 b

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