

## ECAT Pre General Science Physics Chapter 2 Vectors and Equilibrium Online Test

Sr	Questions	Answers Choice
1	A vector which has magnitude 'one' is called:	A. Resultant vector B. A unit vector C. Position vector D. None of these
2	A person starts his journey from a point O, travels 4 Km SW, then 4 Km NW, and finally 4 Km north-east. At what distance is he now from point O?	A. 0 Km B. 4 Km C. 8 Km D. 12 Km
3	Two vectors to be combined have magnitudes of 60 N and 35 N. Pick the possible answer:	A. 100 N B. 70 N C. 20 N D. Zero
4	A vector of magnitude 5 N is added to a vector of magnitude 8 N while the orientations are changeable. Range of their possible sum will be very from:	A. Zero to 3 N B. 1 N to 13 N C. 13 N to 3 N D. None of these
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6	If the vector 5 N lies along with x-axis, then its component along y-axis will be:	A. Zero B. 5 N C. 7 N D. 10 N
7	The rectangular components of a vector are equal in magnitude when the vector makes and angle _____ with their x-component:	A. 0° B. 30° C. 45° D. 60°

8	When the magnitude of two component vectors are equal to that of their resultant, then the angle between the components is:	<p>initial;"&gt;"&lt;/span&gt;  B. 90&lt;span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"&gt;"&lt;/span&gt;  C. 120&lt;span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"&gt;"&lt;/span&gt;  D. 150&lt;span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"&gt;"&lt;/span&gt;</p>
9	If a vector lies in second quadrant, then $B_x$ and $B_y$ are:	<p>A. -, +  B. +, -  C. +, +  D. -, -</p>
10	Parallel vectors of same magnitudes:	<p>A. Are equal  B. Are unequal  C. When added give the some equal to zero  D. Give the answer equal to zero</p>
11	The direction of vector in space is specified by:	<p>A. One angle  B. Two angles  C. Three angles  D. None of these</p>
12	The direction of a vector in space requires:	<p>A. X-axis  B. X and Y-axes  C. XYZ axes  D. Y and Z-axes</p>
13	Choose the set of physical quantities, which have both numerical and directional properties:	<p>A. Velocity, mass  B. Speed, acceleration  C. acceleration weight  D. Distance, force</p>
14	The perpendicular distance from the axis of rotation to the line of action of force is called:	<p>A. Moment arm  B. Moment of a force  C. Torque  D. Non of these</p>
15	Torque is also called:	<p>A. Momentum  B. Linear inertia  C. Moment of a force  D. Mass</p>