

ECAT Physics Chapter 2 Vectors and Equilibrium Online Test

Sr	Questions	Answers Choice
1	For measuring the angle between two vectors graphically, we join:	A. Tails of both the vectors B. Tail of one vector with the head of other C. Heads of both the vectors D. None of these
2	The resultant of two velocities 3 m/sec and 400 cm/sec making an angle 90° with each other is:	A. 20 m/sec B. 5 m/sec C. 3 m.sec D. None of these
3	The magnitude of the resultant of two forces may be increased by:	A. Increasing the angle between them B. Decreasing the angle between them C. Drawing a triangle to represent them D. None of these
4	The perpendicular distance from the axis of rotation to the line of action of force is called:	A. Moment arm B. Moment of a force C. Torque D. Non of these
5	If x-component of a vector is -3 N and y-component is 3 N, then angle of resultant vector will x-axis is:	A. 45 ° B. 315 °
6	Two forces of 10 N and 8 N are applied simultaneously to a body. the maximum value of their resultant is:	A. 2 N B 2 N C. 18 N D. 36 N
7	The change of order of vectors in a dot product of two vectors:	A. Changes its value B. Doesn't change it's value C. Changes the direction product quantity D. None of these
8	Scalar product is also called:	A. Cross product B. Dot product C. Product scalar

		D. <div>Product vector</div>
9	Unit vector is used to specify:	A. Magnitude of a vector B. Dimensions of a vector C. Direction of a vector D. Position of a vector
10	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
11	Which of the following is scalar quantity?	A. Electric potential B. Velocity C. Momentum D. Force
12	If a vector lies in second quadrant, than B _x and B _y are:	A,+ B. +,- C. +,+ D,-
13	The rectangular components of a vector are equal in magnitude when the vector makes and anglewith their x-component:	A. 0 ° B. 30 °
14	The magnitude of resultant of three vectors is 3. Its x-component is one, y-component is two, then its z-component is:	A. 0 B. 1 C. 2 D. 3
15	Two forces each of 10 N act on a body, if the force are inclined at 30° and 60° respectively with x-axis, then x-component of their resultant is:	A. 20 N B. 13.66 N C. 10 N D. 8.66 N
16	Two forces each of the magnitude F act perpendicular to each other. The angle made by the resultant force with the horizontal will be:	A. 30 ° B. 45 ° C. 60

D. <div>Product vector</div>

		background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. 90 °
17	When a vector is multiplied by a negative number, its direction:	A. Remains the same B. Changes C. Changes by 180