

## ECAT Pre General Science Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	A. $a^1 + a^2$ B. $a^2 <sup>2</sup> <sup>1</sup> + a^2 <sup>2</sup>$
3	Which of the following is a vector	A. length B. momentum C. volume D. speed
4	If $a + b + c = 0$ then which of the following is true	A. $a = b = c = 0$ B. $a, b = b, c = c, a$ C. $a \times b = b \times c = c \times a$ D. None
5	Three points whose position vector $a, b, c$ are collinear	A. $a \times b + b \times c + c \times a = 0$ B. $a, b + b, c + c, a = 0$ C. $a,  a \times c  = 0$ D. $a + b + c = 0$
6	Question Image	A. $[0, 0, 0]$ B. $[1, 0, 0]$ C. $[0, 1, 0]$ D. $[0, 0, 1]$
7	Question Image	D. none of these
8	Question Image	D. none of these
9	Question Image	D. none of these
10	If $a, b, c$ are sides of a triangle taken in order then $a \times b =$	A. $b \times c$ B. $b \times a$ C. $c \times a$ D. Both a & b
11	The area of the rhombus whose vertices are $A(0,0), B(2,1), C(3,3), D(1,2)$ is	A. 36 square units B. 3 square units C. 6 square units D. 18 square units
12	The position vector of any point in space is	
13	Question Image	A. A B. 0 C. Unit vector D. None
14	Projection of vector $u$ along $v$ is	A. $ v  \cos\theta$ B. $ u  \cos\theta$ C. $ v  \sin\theta$ D. $ u  \sin\theta$
15	Which of the following is a vector.	A. work B. time C. density D. electric field
16	Which of the following is not a unit vector	A. $[1, 1, 1]$ B. $[0, 1, 0]$ C. $[0, 0, 1]$ D. $[1, 0, 0]$
17	Question Image	D. none of these
18	Question Image	
19	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these

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Which of the following is a scalar.

- A. force
  - B. frequency
  - C. weight
  - D. acceleration
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