

## ECAT (Pre-Eng) Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	Which of the following is a scalar.	A. force B. frequency C. weight D. acceleration
2	Projection of vector $u$ along $v$ is	A. $ v  \cos\theta$ B. $ u  \cos\theta$ C. $ v  \sin\theta$ D. $ u  \sin\theta$
3	Question Image	A. $a = b$ B. $a+b= 1$ C. $ a+b  =0$ D. None
4	If $a^2 = b^2$ then	D. none of these
5	Question Image	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
6	If $ ai + (a+1)j + 2k  = 3$ then value of $a$ is	A. Zero B. Negative C. Positive D. None of these
7	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these
8	Question Image	A. 0 B. 1
9	Question Image	D. none of these
10	Question Image	D. none of these
11	Question Image	D. none of these
12	Question Image	D. none of these
13	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
14	Question Image	D. none of these
15	Question Image	A. 0 B. 1 C. -1 D. None
16	Question Image	A. $l^{sup2} + m^{sup2} + n^{sup2} = 0$ B. $l^{sup2} - m^{sup2} - n^{sup2} = 1$ C. $l^{sup2} + m^{sup2} + n^{sup2} = 1$ D. $l^{sup2} + m^{sup2} + n^{sup2} = 0$
17	The number $z$ so that the triangle with vertices $A(1, -1, 0), B(-2, 2, 1)$ and $C(0, 2, z)$ is a right triangle with right angle at vertex $C$	A. 1,2 B. -1,-2 C. 2,-1 D. -2,1
18	Question Image	A. constant vector B. unit vector C. zero vector D. null vector
19	A vector with magnitude one is called	

