

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

Sr	Questions	Answers Choice
1	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]
2	Question Image	D. none of these
3	Question Image	A. A B. 0 C. Unit vector D. None
4	Question Image	
5	Question Image	D. none of these
6	Three points whose position vector a,b,c are collinear	A. $axb + bxc + cxa = 0$ B. $a, b + b, c + c, a = 0$ C. $a,  a \times c  = 0$ D. $a + b + c = 0$
7	If the angle between two vectors with magnitude 2 and 15 is $30^\circ$ then their scalar product is	B. 15 C. 30
8	$3j \cdot k \times i$	A. 0 B. 1 C. 3 D. 9
9	Question Image	
10	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
11	[i,j,k]	A. 0 B. 2 C. 1 D. -2
12	Question Image	
13	Question Image	A. 1 B. 0
14	If $ ai + (a+1)j + 2k  = 3$ then value of a is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
15	Which of the following is a vector.	A. work B. time C. density D. electric field
16	Question Image	D. none of these
17	Which of the following us a scalar	A. displacement B. velocity C. acceleration D. density
18	The unit vector along z-axis is	D. none of these
		A. i0. 0. 0i

19

Question Image

- B. [1, 0, 0]
- C. [0, 1, 0]
- D. [0, 0, 1]

20

Question Image