

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

Sr	Questions	Answers Choice
1	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. $a + b + c = 0$
2	<input type="text" value="Question Image"/>	
3	<input type="text" value="Question Image"/>	
4	<input type="text" value="Question Image"/>	D. none of these
5	The position vector of any point in space is	
6	A vector with magnitude one is called	A. constant vector B. <b>unit vector</b> C. zero vector D. null vector
7	<input type="text" value="Question Image"/>	D. none of these
8	<input type="text" value="Question Image"/>	
9	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. <b>2, -1</b> D. -2, 1
10	If $a^2 = b^2$ then	A. <b><math>a = b</math></b> B. $a + b = 1$ C. $ a + b  = 0$ D. None
11	<input type="text" value="Question Image"/>	A. A B. <b>0</b> C. Unit vector D. None
12	Which of the following is a scalar.	A. force B. <b>frequency</b> C. weight D. acceleration
13	<input type="text" value="Question Image"/>	
14	The unit vector along y-axis is	D. none of these
15	<input type="text" value="Question Image"/>	
16	<input type="text" value="Question Image"/>	
17	The ortho center of triangle whose vertices are $(0, 0), (3, 0), (0, 4)$ is	A. <b>(0, 0)</b> B. (1, 1) C. (2, 2) D. (3, 3)
18	<input type="text" value="Question Image"/>	C. 1 D. 0
19	<input type="text" value="Question Image"/>	A. Free vector B. Null vector C. <b>Unit vector</b> D. None of these
20	<input type="text" value="Question Image"/>	