

ECAT Pre General Science Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	If a,b,c are three non-coplanar vector then $[a + b, b + c, c + a] = \underline{\hspace{2cm}}$	A. [a.b.c] B. $2[a,b,c]$ C. [abc]-2 D. $2[abc]^2$
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. -1 D. None
3	If $ a \times b ^2 + (a,b)^2 = \underline{\hspace{2cm}}$	A. $ a ^2 + b ^2$ B. $ a ^2 - b ^2$ C. $ a ^2 b ^2$ D. None
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	The physical quantity which possesses both magnitude and direction is called a	A. scalar B. vector C. constant D. none of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	D. none of these
8	The unit vector along z-axis is	D. none of these
9	$3j . k \times i$	A. 0 B. 1 C. 3 D. 9
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	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
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	D. none of these
15	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
16	For two vector a and b, $a+b = \underline{\hspace{2cm}}$	A. a b B. b+a C. b-a D. None
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $a^{₁+ a^{₂}$ B. $a^{²₁+ a^{²₂}$
18	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
19	Question Image <input style="width: 500px; height: 20px;" type="text"/>	C. 0 D. 1
20	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]