

ECAT Mathematics Chapter 24 Vectors Online Test

Sr	Questions	Answers Choice
1	The ortho center of triangle whose vertices are (0,0)(3,0)(0,4) is	A. (0,0) B. (1,1) C. (2,2) D. (3,3)
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. -1 D. None
3	If C is the mid point of AB and P is any point outside AB, then	
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A, B, C are coincident B. A, B, C are collinear C. Both A and B D. None of these
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	$3j \cdot k \times i$	A. 0 B. 1 C. 3 D. 9
9	The angle between the vectors $3i + j - k$ and $2i - j + k$ is	
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. 0 C. Unit vector D. None
11	If the vector $2i + 4j - 7k$ and $2i + 6j + xk$ are perpendicular then $x = ?$	A. 0 B. 2 C. 4 D. 7
12	If the angle between two vectors with magnitude 6 and 2 is 60° when their scalar product is	A. 12 B. 6 C. 3 D. 0
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 90° C. 180° D. 360°
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
15	The direction cosines of y-axis are	A. 1, 0, 0 B. 0, 1, 0 C. 0, 0, 1 D. 1, 1, 1
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $l^2 + m^2 + n^2 = 0$ B. $l^2 + m^2 + n^2 = 1$ C. $l^2 + m^2 + n^2 = 1$ D. $l^2 + m^2 + n^2 = 0$
17	Which of the vectors have opposite direction?	
18	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
19	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these

20	A vector of magnitude zero is called	A. Position vector B. Null vector C. Free vector D. None of these
21	Unit vector in the positive direction of x-axis is	
22	Question Image	A. Free vector B. Null vector C. Unit vector D. None of these
23	If the angle between two vectors with magnitude 2 and 15 is 30° then their scalar product is	B. 15 C. 30
24	Question Image	A. 12 B. 6 C. 8 D. none of these
25	Question Image	
26	Question Image	
27	Question Image	
28	Question Image	
29	Question Image	
30	Question Image	D. none of these