

ECAT Pre General Science Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 12 B. 6 C. 8 D. none of these
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. parallel vectors B. perpendicular vectors C. concurrent vectors D. collinear vectors
3	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these
4	If $\text{Proj}_u v = \text{Proj}_v u$, then	A. u and v are parallel B. $ u = v $ C. u and v are perpendicular D. One of u or v
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	C. 0 D. 1
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	If 2 and 2 are x and y components of vector then its angle with x-axis is	A. 30° B. 45° C. 60° D. 90°
9	If $ ai + (a+1)j + 2k = 3$ then value of a is	A. 1, 2 B. -1, -2 C. 1, -2 D. -1, 2
10	If C is the mid point of AB and P is any point outside AB, then	
11	The direction cosines of y-axis are	A. 1, 0, 0 B. 0, 1, 0 C. 0, 0, 1 D. 1, 1, 1
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 0
13	The physical quantity which possesses both magnitude and direction is called a	A. scalar B. vector C. constant D. none of these
14	Which of the following is a scalar	A. displacement B. velocity C. acceleration D. density
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 90° C. 180° D. 360°
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	

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Question Image

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

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Which of the vectors have opposite direction?

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Question Image