

ECAT (Pre-Eng) Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	Which of the following does not represent absolute value of a vector	A. magnitude B. length C. norm D. number
2	Question Image	
3	If $\text{Proj}_{\mathbf{u}} \mathbf{v} = \text{Proj}_{\mathbf{v}} \mathbf{u}$, then	A. \mathbf{u} and \mathbf{v} are parallel B. $ \mathbf{u} = \mathbf{v} $ C. \mathbf{u} and \mathbf{v} are perpendicular D. One of \mathbf{u} or \mathbf{v}
4	The null vector is regarded to be perpendicular to	A. Every vector B. In some cases C. Both a and b D. None
5	If $\mathbf{a} + \mathbf{b} + \mathbf{c} = \mathbf{0}$ then which of the following is true	A. $\mathbf{a} = \mathbf{b} = \mathbf{c} = \mathbf{0}$ B. $\mathbf{a}, \mathbf{b} = \mathbf{b}, \mathbf{c} = \mathbf{c}, \mathbf{a}$ C. $\mathbf{a} \times \mathbf{b} = \mathbf{b} \times \mathbf{c} = \mathbf{c} \times \mathbf{a}$ D. None
6	The unit vector along x-axis is	D. none of these
7	Question Image	A. 25 B. 16 C. 5 D. 0
8	Question Image	A. 0 B. 90° C. 180° D. 360°
9	Question Image	
10	If the vector $2\mathbf{i} + 4\mathbf{j} - 7\mathbf{k}$ and $2\mathbf{i} + 6\mathbf{j} + x\mathbf{k}$ are perpendicular then $x = ?$	A. 0 B. 2 C. 4 D. 7
11	$\mathbf{u}, \mathbf{v}, \mathbf{w}$ and $\mathbf{u} \times (\mathbf{v} \cdot \mathbf{w})$ are	A. Equal B. Parallel C. Additive immense of each other D. Meaningless
12	Question Image	
13	Question Image	D. none of these
14	The physical quantity which can be specified by a number alongwith unit is called a	A. scalar B. vector C. constant D. none of these
15	Question Image	A. $[0, 0, 0]$ B. $[1, 0, 0]$ C. $[0, 1, 0]$ D. $[0, 0, 1]$
16	The zero vector is regarded to be parallel to	A. Every vector B. In some cases C. Both a, b D. None
17	Question Image	
18	Question Image	A. perpendicular vectors B. concurrent vectors C. parallel vectors D. none of these
		A. direction ratios

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Question Image

- B. direction cosines
- C. direction angles
- D. none of these

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Question Image