

Mathematics ECAT Pre Engineering Chapter 24 Vectors Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. 1 C. -1 D. None
2	If C is the mid point of AB and P is any point outside AB, then	
3	Question Image	A. A, B, C are coincident B. A, B, C are collinear C. Both A and B D. None of these
4	Question Image	
5	Question Image	
6	Question Image	
7	$3j \cdot k \times i$	A. 0 B. 1 C. 3 D. 9
8	The angle between the vectors $3i + j - k$ and $2i - j + k$ is	
9	Question Image	A. A B. 0 C. Unit vector D. None
10	If the vector $2i + 4j - 7k$ and $2i + 6j + xk$ are perpendicular then $x = ?$	A. 0 B. 2 C. 4 D. 7
11	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
12	Question Image	A. 0 B. 90° C. 180° D. 360°
13	Question Image	
14	The direction cosines of y-axis are	A. 1, 0, 0 B. 0, 1, 0 C. 0, 0, 1 D. 1, 1, 1
15	Question Image	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. $l^2 + m^2 + n^2 = 0$
16	Which of the vectors have opposite direction?	
17	Question Image	
18	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. None of these
19	A vector of magnitude zero is called	A. Position vector B. Null vector C. Free vector

D. None of these

20 Unit vector in the positive direction of x-axis is

21 Question Image

- A. Free vector
- B. Null vector
- C. Unit vector
- D. None of these

22 If the angle between two vectors with magnitude 2 and 15 is 30° then their scalar product is

- B. 15
- C. 30

23 Question Image

- A. 12
- B. 6
- C. 8
- D. none of these

24 Question Image

25 Question Image

26 Question Image

27 Question Image

28 Question Image

29 Question Image

D. none of these

30 Question Image

D. none of these