

## ECAT Pre General Science Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	A. Free vector B. Null vector C. Unit vector D. None of these
3	Which of the following represents a vector	D. (x, y)
4	The position vector of the point P(a, b, c) is	
5	Question Image	A. 0 B. 90° C. 180° D. 360°
6	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)
7	If $ ai + (a+1)j + 2k  = 3$ then value of a is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
8	Question Image	D. none of these
9	If C is the mid point of AB and P is any point outside AB, then	
10	If $uv = \text{Proj}_v u$ then	A. U and v are parallel B. u is a unit vector C. v is a unit vector D. Both b and c
11	Unit vector in the positive direction of x-axis is	
12	Question Image	A. 0 B. 1
13	Question Image	D. none of these
14	Question Image	
15	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
16	If a force $F = 2i + j + 3k$ acts at point (1,-2,2) of a body then the moment of F about a point lying on the line of action of the force is	A. 5 B. Equal to the moment of the force about origin C. 0 D. Cannot be found
17	The null vector is regarded to be perpendicular to	A. Every vector B. In some cases C. Both a and b D. None
18	Question Image	
19	Question Image	A. $ a ^2 +  b ^2 +  c ^2 = 0$ B. $ a ^2 +  b ^2 +  c ^2 = 1$ C. $ a ^2 +  b ^2 +  c ^2 = 1$ D. $ a ^2 +  b ^2 +  c ^2 = 0$
20	If $a^2 = b^2$ then	A. $a = b$ B. $a+b = 1$ C. $a-b = 1$ D. $a-b = 0$

C.  $|a+b| = 0$   
D. None