ECAT (Pre-Eng) Mathematics Chapter 24 Vectors

Sr	Questions	Answers Choice
1	If θ be angle between u,v and u,v determine the sides of a triangle then the third side opposite to angle θ has length	A. |u+v| B. |u|+|v| C. |u-v| D. |u|-|v|
2	Question Image	
3	Question Image	A. direction ratios B. direction cosines C. direction angles D. none of these
4	Question Image	A. 0 B. 1 C. -1 D. None
5	Which of the following is a scalar	A. weight B. force C. speed D. momentum
6	Which of the following represents a vector	D. (x, y)
7	If a,b,c are unit vectors then $\|a + b\|2 + \|a - b\|2$	A. 4 B. 8ab C. 9cos D. 4(a,b)
8	[i,j,k]	A. 0 B. 2 C. 1 D. -2
9	If $\|a \times b\|2 + (a,b)2 =$ _____	A. $\|a\|2 + \|b\|2$ B. $\|a\|2 - \|b\|2$ C. $\|a\|2\|b\|2$ D. None
10	Question Image	A. 0 B. 1
11	The number z so that the triangle with vertices A(1,-1,0),B(-2,2,1)and C(0,2,z) is a right triangle with right angle at vertex C	A. 1,2 B. -1,-2 C. 2,-1 D. -2,1
12	Which of the following does not represent absolute value of a vector	A. magnitude B. length C. norm D. number
13	Question Image	A. [0, 0, 0] B. [1, 0, 0] C. [0, 1, 0] D. [0, 0, 1]
14	Question Image	
15	Question Image	A. 1 B. 0
16	Question Image	
17	Question Image	
18	Question Image	D. none of these
19	Question Image	A. perpendicular vectors B. concurrent vectors C. parallel vectors D. none of these
20	Question Image	D. none of these