ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	$(1 + 2x)^4$= _____	A. 1 + 4x + 6x²+ 4x³+ x⁴ B. 1 - 4x + 6x²- 4x³+ x⁴ C. 1 - 8x + 24x²- 32x³+ 16x⁴ D. 1 + 8x+ 24x²+ 32x³+ 16x⁴
2	What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$	A. 2 B. 26 C. 27 D. 1
3	Period of Cotangent function is	A. π B. -π C. 0 D. -2π
4	Question Image	
5	If the elevation of the sun is 30°, then the length of the shadow cast by a tower of 150 ft height is	
6	Question Image	
7	The vertex of the graph of the quadratic function f(x) = x2 -10, is	A. (0 , -10) B. (-10,0) C. (10,0) D. (0,10)
8	(x-1) is a factor of	A. 2x³- 3x²+9 B. 2x³-5x-8 C. 48x²⁻46x-9 D. x⁹-1
9	For the equation $\|x^2\| + \|x\| -6 = 0$, the roots are	A. One and only one real number B. Real with sum one C. Real with sum zero D. Real with product zero
10	The complement of set A relative to universal set U is the set	A. {x / x∈ A∧ x∈ U} B. {x / x∉ A∧ x ∈ U} C. {x / x∈ A and x ∉ U} D. A-U
11	The square root of 2i - 20i is	A. ±(5 - 2i) B. ±(5+ 2i) C. (5 - 2i) D. None of these
12	Trival solution of homogeneous linear equation is	A. (0, 0, 0) B. (1, 2, 3) C. (1, 3, 5) D. a, b and c
13	Sum of two quantities is at least 20 is denoted by	A. x +y =20 B. x +y≥ 20 C. x +y≠ 20 D. x +y≤20
14	Question Image	
15	Question Image	
16	ax + by < c is linear inequality in	A. four variables B. three variables C. two variables D. one variable
17	In polar form of complex number r =	
		A. | x | < 1/2

18	The expansion of $(1 + 2x)^{-2}$is valed if	B. | x | < 1 C. | x | < 2 D. | x | < 3
19	Q ∪ Q' =	A. Q B. Q' C. N D. R
20	Question Image	A. Zero matrix B. Diagonal matrix C. Column matrix D. Scalar matrix