

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	A. real number B. complex number C. rational number D. irrational number
2	The equation of the circle with centre (h, k) and radius r is	A. $(x + h)^2 + (y + k)^2 = r^2$ B. $(x + h)^2 + (y - k)^2 = r^2$ C. $(x - h)^2 + (y + k)^2 = r^2$ D. $(x - h)^2 + (y - k)^2 = r^2$
3	$\sqrt{11}$ is	A. an irrational number B. Rational number C. odd number D. Negative number
4	If $a > b$ or $a < b$ then $a = b$ is a	A. Additive property B. Transitive property C. Trichotomy property of inequality D. None of above
5	If the exponent in the binomial expansion is 6, then the middle term is	A. 2nd B. 3rd C. 4th D. 5th
6	$\sqrt{25}$ is a number	A. Rational B. Irrational C. Natural D. Odd
7	Question Image	
8	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
9	The 6th term of the sequence 7,9,12,16.....is	A. 27 B. 32 C. 20 D. 19
10	For non-trivial solution $ A $ is	A. $A = 0$ B. $A \neq 0$ C. $ A = 0$ D. None of these
11	The value of $\sin [\arccos (-1/2)]$ is	
12	The vertex of the graph of the quadratic function $f(x) = x^2 - 10$, is	A. (0, -10) B. (-10,0) C. (10,0) D. (0,10)
13	The equation of the circle with centre (-h, -k) and radius r is	A. $(x + h)^2 + (y + k)^2 = r^2$ B. $(x + h)^2 + (y - k)^2 = r^2$ C. $(x - h)^2 + (y + k)^2 = r^2$ D. $(x - h)^2 + (y - k)^2 = r^2$
14	$x^2 + x - 6 = 0$ is	A. An equation B. An identity C. A polynomial D. None of these
15	Every prime number is also	A. Rational number B. Even number C. Irrational number

		D. Multiple of two numbers
16	Question Image	B. $6x + 2 + c$ C. $6x + x^{2/3} + c$ D. $6x^{3/2} + x^{2/3} + x$
17	Question Image	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
18	Question Image	
19	Three dice are thrown together. The probability of getting a total of at least 6 is	A. $103 / 108$ B. $10 / 216$ C. $93 / 108$ D. None of these
20	What is the period of $\tan \frac{4}{3} x = ?$	A. $\pi/4$ B. $4\pi/3$ C. $7\pi/4$ D. $3\pi/4$