

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	If A is an event then which of the following is true	A. $P(A) < 0$ B. $0 \leq P(A) \leq 1$ C. $P(A) > 0$ D. None
2	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
3	Question Image	A. 3 B. 2 C. 8 D. 0
4	If w is a cube root of unity then $1 + w + w^2 =$ _____	A. 1 B. 2 C. 0 D. -1
5	Question Image	
6	The proposition $S(k+1)$ is true when _____ is true $\forall K \in \mathbb{N}$	A. $S(n)$ B. $S(k)$ C. $S(1)$ D. $S(k-1)$
7	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. +1 D. 0
8	Question Image	A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$
9	$\forall a \in \mathbb{R} \exists o \in \mathbb{R}$ such that $a + v = 0 + a = a$ is property of	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse
10	Question Image	
11	Question Image	
12	Question Image	A. 0 B. 1
13	Question Image	
14	The set $\{1, -1, 1, -1\}$, form a group under	A. Addition B. Multiplication C. Subtraction D. None
15	Two circle $x^2 + y^2 + 2x - 8 = 0$ and $x^2 + y^2 - 6x - 46 = 0$:	A. touch internally B. do not intersect C. touch externally D. None of these
16	If the 4th term in the expansion of $(px + x^{-1})^m$ is 2.5 for all $x \in \mathbb{R}$, then	
17	When rational fraction is separated into partial fractions, the result is	A. an identity B. A fraction C. A partial sum D. Improper fraction
18	Question Image	A. $a = -1/2, b = -1$ B. $a = 1, b = 2$ C. $a = 2, b = 3$ D. None of above

19 the largest degree of the terms in the polynomials is called

- A. terms of the polynomial
- B. degree of a polynomial
- C. co-efficient
- D. monomial

20 Question Image