

## **ECAT Mathematics Online Test**

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Sr	Questions	Answers Choice
1	If n is a negative integer n! is	A. 1 B. 0 C. Unique D. Not defined
2	In a country, 55% of the male population has houses in cities while 30% have houses both in cities and in village. Find the percentage of the population that has house only in villages.	A. 45 B. 30 C. 25 D. 50
3	The multiplicative inverse of 1 is	A. 1 B1 C. 0 D. Does not exist
4	Every subset of a finite set is	A. Disjoint B. Null C. Finite D. Infinite
5	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. None of these
6	Which element is the additive inverse of (a,b) in Complex numbers	A. (a,0) B. (0,b) C. (a,b) D. (-a,-b)
7	Question Image	A. 120 B. 5 C. 4 D. 6
8	If $a,\beta$ are the roots of the equation $x^2 + kx + 12 = 0$ such that $a - \beta = 1$ , the value of k is	A. 0 B. ±1 C. ±5 D. ±7
9	Question Image	A. Does not exist because f is unbounded B. Is not attained even though f is bounded C. Is equal to 1 D. Is equal to -1
10	The coefficient of the third term of (8a-b) <sup>1/3</sup> , after simplification is	A228 B. 1/288 C. 1/220 D1/177
11	The expansion $(1 + x)^{-3}$ holds when	A.  x  > 1 B.  x  < 1 C. x < 1 D. x > 1
12	The distance between the points A(3,1) and B(-2,-4) is	A. 5 C. 25 D. 10
13	Question Image	A. y:x B. x:y Cy:x Dx:y
14	The trigonometric function are continuous whenever	A. They are defined B. their limit exist C. Their period is given D. All are incorrect
15	Question Image	A. 0 B1-w <sup>2</sup>

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16	10=	A. 360' B. 60" C. 60' D. 3600'
17	In one hour, the hour hand of a clock turns through	
18	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
19	If $a_1$ , $r$ are first term and the common ratio respectively then the sum of an infinite geometr series is	ric
20	Question Image	