

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	Question Image	A. 1/8 B. 1/2 C. 1/4 D. 1/6
4	Total number of subsets that can be formed out of the set {a,b,c} is	A. 1 B. 4 C. 8 D. 12
5	Which conjunction is not true ?	
6	Question Image	
7	$\sqrt{11}$ is	A. an irrational number B. Rational number C. odd number D. Negative number
8	Question Image	A. 28 / 81 B. 28 / 243 C. 81 / 28 D. 243 / 82
9	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. 1/5 B. 1/36 C. 1/7 D. 1/63
10	If we have a statement "if p then q" then q is called	A. Conclusion B. Implication C. Unknown D. Hypothesis
11	If A and B are two disjoint events then	A. $P(A \cup B) = P(A) + P(B)$ B. $P(A \cup B) = P(A) - P(A \cap B)$ C. $P(A \cup B) = P(A) \text{ or } P(B)$ D. None
12	If A is a non-singular matrix then adj A is	A. Non-singular B. Symmetric C. Singular D. Non defined
13	A non-terminating non_recurring decimal represents an	A. Irrational no B. Both a & c C. Rational no D. None of these
14	$a_n - a_{n-1}$ will be common difference in an A.P if	A. $n = 1 \forall n \in \mathbb{N}$ B. $n \geq 1 \wedge n \in \mathbb{N}$ C. $n \in \mathbb{Z}$ D. None of the above
15	Question Image	A. a = 2, b = 3 B. a = 3, b = 2 C. a = 2, b = 1, 2 D. a = 3, b = 3
16	Question Image	
17	$n! > 2^{n-1}$ is true when	A. $n \leq 3$ B. $n \leq 6$ C. $n \geq 4$ D. $n \leq 6$
18	-2, 1, 4, 7,.... is _____	A. Harmonic sequence B. Arithmetic sequence C. Geometric sequence D. None of these

19 If A is such that a,A,B are in A.P then A is called

- A. A.M
- B. Common ratio
- C. Common difference
- D. None of these

20 The value of $\sin^2 20^\circ + \sin^2 70^\circ$ is equal to

- A. 1
- B. 2
- C. -1
- D. $1/2$