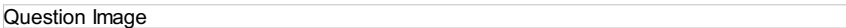


ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	All letters of the word "AGAIN" are permuted in all possible ways and the words so formed (with or without meaning) are written as in dictionary, then the 50th word is	A. NAAGI B. NAAIG C. IAANG D. INAGA
2	Question Image	
3	If there is one-one correspondence between A and B, then we write.	A. $A = B$ B. $A \subseteq B$ C. $A \supseteq B$ D. $A \sim B$
4	Latus rectum = 4 x _____	A. focal distance of the vertex B. Chord C. Focus D. 1/2
5	Question Image	D. none of these
6	If the 4th term in the expansion of $(px + x^{-1})^m$ is 2.5 for all $x \in R$, then	
7	Question Image	A. $1/x$ B. $-x$ C. $2x$ D. $0.5x$
8	A committee consists of 9 experts taken from three institutions A, B, and C, of which 2 are from A, 3 from B and 4 from C. If three experts resign, then the probability that they belong to different institutions is	A. $1/729$ B. $1/24$ C. $1/21$ D. $2/7$
9	The period $\sin^2 \theta$ is	A. π B. $\pi/2$ C. 2π D. $\pi/4$
10	Question Image	A. 2 B. -1 C. 8 D. not defined
11	If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$, then the remainder is	A. 0 B. 7 C. -7 D. 5
12	The physical quantity which possesses both magnitude and direction is called a	A. scalar B. vector C. constant D. none of these
13	Question Image	C. $2x$ D. 2
14	If the angle between two vectors $\underline{u}$ and $\underline{v}$ is 0 or π , then the vectors $\underline{u}$ and $\underline{v}$ are:	A. Orthogonal B. Collinear C. Perpendicular D. None of these
15	$\sin h x =$ _____	
16	Question Image	A. 2 B. 4 C. 3 D. 16
17	The domain of an infinite sequence is a	A. Set of natural numbers B. R C. Subset of N D. None of the above

18 A number A is called the arithmetic mean between a and b if a, A, b is _____

- A. Arithmetic sequence
- B. Geometric sequence
- C. Harmonic sequence
- D. Arithmetic sequence

19 

20 The unit vector along y-axis is

- D. none of these