

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Associative law of multiplication	A. $ab - ba$ B. $a(bc) = (ab)c$ C. $a(b + c) = ab + ac$ D. $(a + b)c = ac + bc$
2	$\pi$ is _____	A. A complex number B. A rational number C. A natural number D. An irrational number
3	The middle term(s) of $(a+x)^{11}$ is	A. 6th term B. 6th or 7th C. 7th term D. 6th and 7th
4	Question Image	A. $a = a$ B. $a < a$ C. $a > a$ D. $a <sup>2</sup> >= a$
5	$a > b \Rightarrow a + c > b + c$ is known as	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
6	If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$ , then the remainder is	A. 0 B. 7 C. -7 D. 5
7	How many arrangements of the letter of the word PAKPATTAN can be made	
8	The seventh term of $(x^3 + 1/x)^8$ is	A. 71 B. -22 C. 27 D. 28
9	The probability to get an odd number in a dice thrown once is	A. $1/2$ B. $1/6$ C. $1/3$ D. 2
10	$(n + 2)(n + 1)n$ in factorial form is	
11	The set $\{\{a, b\}\}$ is	A. Infinite set B. Singleton set C. Two points set D. None
12	The set $(\mathbb{Z}, +)$ forms a group	A. Forms a group w.r.t. addition B. Non commutative group w.r.t. multiplication C. Forms a group w.r.t. multiplication D. Doesn't form a group
13	If $a, b, c$ are in A.P., $a, b, c$ are in G.P. then $A, m^2b, c$ are in	A. A.P. B. G.P. C. H.P. D. None of these
14	Addition is not operation on	A. Natural numbers B. Even numbers C. odd numbers D. set of integers
15	If $n$ is positive integers, then $2^n > 2n + 1$ , only when	A. $n \leq 3$ B. $n \geq 3$ C. $n \leq 2$ D. $n \leq 1$
16	Period of Cotangent function is	A. $\pi$ B. $-\pi$ C. 0 D. $-2\pi$

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17	The angle between the vectors $\underline{u} = [-3, 5]$ and $\underline{v} = [6, -2]$ is:	A. $\pi/2$ B. $-3\pi/2$ C. $\pi$ D. None of these
18	Question Image <input type="text"/>	
19	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
20	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

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