

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	$\forall a, b, c \in \mathbb{R}, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
2	If ${}^6P_r = {}^6P_{r+1}$, then r is equal to	A. 4 B. 3 C. 2 D. 1
3	Question Image	
4	Three dice are thrown together. The probability of getting a total of at least 6 is	A. 103 / 108 B. 10 / 216 C. 93 / 108 D. None of these
5	$a_n - a_{n-1}$ 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
6	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
7	The multiplicative inverse of $1 - 2i$ is	
8	Question Image	A. 0 B. 1 C. -1 D. none of these
9	Question Image	A. 2 D. 0
10	Question Image	A. $n(A)$ B. $n(B)$ C. 0 D. 1
11	Question Image	
12	The no of term is the expansion of $(a+x)^{n-1}$ is	A. $n+1$ B. $n-1$ C. n D. $n-2$
13	Question Image	
14	The smallest positive root of the equation $\tan x - x = 0$ lies on	
15	A circle drawn inside a triangle and touching its sides is called _____:	A. Circumcircle B. Incircle C. Escribed circle D. unit circle
16	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
17	Which of the following statement, is true	A. Lahore is in Punjab and 5×7 B. Lahore is the capital of Pakistan and 3×23 C. Lahore is capital of Sindh and $2 + 2 = 7$ D. Lahore is the capital of Sindh or $2 + 2 = 4$
18	The number of significant numbers which can be formed by using any number of the digits 0,	A. 260 B. 356

1, 2, 3, 4 but using each not more than once in each number is

C. 410
D. 96

19 If $|a| = |b| = |a+b| = 1$, then $|a-b|$ is equal to:

A. 1
B. $\sqrt{3}$
C. $\sqrt{2}$
D. 7

20 

A. 2
B. 4
C. 8
D. 16