

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	<input type="text" value="Question Image"/>	A. cosec x + c B. -cosec x + c C. -sec x + c D. sec x + c
2	<input type="text" value="Question Image"/>	
3	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. 2 / 13 B. 4 / 13 C. 5 / 13 D. 8 / 13
4	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
5	$\tan(\cot^{-1}x)$ is equal to	A. $\cot(\tan^{-1}x)$ B. tan x C. secon x D. None of these
6	<input type="text" value="Question Image"/>	
7	The number of permutations of n objects of which there are $n_1$ like of one kind, $n_2$ like of the second kind and $n_3$ like objects of third kind are	
8	Let A and B be two non-empty sets, then any subset of the cartesian product A x B called a	A. Function B. Domain C. Range D. Binary relation
9	9. 8. 7. 6= _____	
10	A diagonal matrix is always	A. Identity B. Triangular C. Scalar D. Non-singular
11	The principal value of $\sin^{-1}[-\sqrt{3}/2]$ is	A. $5\pi/3$ B. $-2\pi/3$ C. $-\sin^{-1}(\sqrt{3}/2)$ D. $\pi/3$
12	The sum if 1,3,5,7,9..... up to 20 terms is	A. 400 B. 472 C. 563 D. 264
13	<input type="text" value="Question Image"/>	
14	Roots of the equation $x^2 - x = 2$ are	A. {2, -1} B. {1, 0} C. {2, 1} D. {-2, 1}
15	<input type="text" value="Question Image"/>	A. mx B. x/m C. $mx^{m-1}$ D. $xm^{m-1}$
16	Range of sin x is _____	A. [-1, 1] B. R C. Negative real numbers D. None of these
17	<input type="text" value="Question Image"/>	
18	The multiplicative inverse of 4 is	A. -4 B. -1/4

18 The multiplicative inverse of 4 is

- C.  $1/4$
- D. 1

19 The angle of elevation of the tops of two towers at the middle point of the line joining the foots of the tower are  $60^\circ$  and  $30^\circ$  respectively. The the ratio of the heghts of the tower is

- A. 2 : 1
- B. 3 : 1
- C. 1 : 2
- D. 1 : 3

20 The function  $\phi(x)$  is an anti derivative of function  $f(x), x \in D_f$  if

- A.  $\phi'(x) = f(x)dx$
- B.  $\phi(x) = f(x)dx$
- C.  $\phi'(x) = f(x)$
- D.  $\phi(x) = f'(x)dx$