

ECAT Mathematics MCQ's Test For Pre General Science

Sr	Questions	Answers Choice
1	Question Image	
2	Number of selections of n different things out of n	A. 1 B. nPr C. $n!$ D. nPr
3	Question Image	
4	Domain of $\cosh x$ is	A. \mathbb{R} B. $\mathbb{R} - \{0\}$ C. $[1, \infty)$ D. $[0, \infty)$
5	The sum of an infinite geometric series exist if	A. $ r < 1$ B. $ r > 1$ C. $r = 1$ D. $r = -1$
6	Question Image	A. A B. 0 C. Unit vector D. None
7	The range of $y = \sin x$ is _____	A. $[1, -1]$ B. $[-1, 1]$ C. $[0, -1]$ D. [<i>r</i>, <i>r</i> + 1)
8	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if n is odd D. None of these
9	The order of the matrix A is 3×5 and that of B is 2×3 . The order of the matrix BA is	A. 2×3 B. 3×2 C. 2×5 D. 5×2
10	A point of a solution regions where two of its boundary lines intersect, is called:	A. Vertex of the solution B. Feasible point C. Point of inequality D. Null point of the solution region
11	The property used in $-3 < -2 \Rightarrow 0 < 1$	A. Commutative property B. Additive property of inequality C. Additive inverse D. Additive identity
12	If n is any positive integer then $3 + 6 + 9 + \dots + 3n = \dots$	
13	Question Image	
14	Question Image	
15	Question Image	A. 1 B. 0
16	The exact value of $\cos^{-1}(0)$ is	A. $\pi/2$ B. $-\pi/2$ C. 3π D. $\pi - \pi/6$
		A. $2(c - a)$ B. $2(a - c)$ C. $2(a + c)$ D. $2(c + a)$

17 If a, b, c, d, e, f are in A.P., then e-c is equal to
B. $2(f - d)$
C. $2(d - c)$
D. $d - c$

18 If $\cos\theta = 9/41$ and $\sin\theta < 0$, then $\tan\theta =$
A. $41/9$
B. $-40/9$
C. $9/10$
D. $3/20$

19 Union of the sets of rational and irrational numbers is called 6th set of
A. Natural numbers
B. Real numbers
C. Whole numbers
D. Prime numbers

20 If $f(x) = x^2 - x$ then $f(-2)$ is
A. 4
B. 6
C. 2
D. 0