

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 \leq 1$ B. $ r \geq 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. $[-\infty, \infty]$
8	Question Image	A. n if n is even B. 0 for any natural number n C. 1 if in 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 $3 + 6 + 9 + \dots + 3n =$ _____	
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. $\frac{2(c-a)}{c+a}$

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