

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Two sets A and B are said to be disjoint if	
2	The third term of a G.P. is the square of first term. If the second term is 8, then the 6th term is	A. 120 B. 124 C. 128 D. 132
3	An infinite sequence has no	A. nth term B. Last term C. Sum D. None of these
4	Question Image	A. Identity matrix B. Diagonal matrix C. Null matrix D. Hermitian matrix
5	The 10th common term between the series $3+7+11+\dots$ and $1+6+11+\dots$ is	A. 191 B. 193 C. 211 D. None of these
6	Question Image	
7	If $f(x) = c$ then $f^{-1}(x)$ equals:	A. 1 B. 0 C. cx D. c
8	If a statement $S(n)$ is true for $n = i$ where i is some natural number and the truth of $S(n)$ for $n = k > i$ implies the truth of $S(n)$ for $n = k + 1$ then $S(n)$ is true for all positive integers	
9	Question Image	A. Linear equation B. Quadratic equation C. Cubic equation D. None of these
10	Question Image	
11	$f(x) = 3x^4 - 2x^2 + 7$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
12	Question Image	
13	If points $(5, 5)$, $(10, x)$ and $(-5, 1)$ are collinear, $x =$	A. 5 B. 3 C. 9 D. 7
14	A non-homogeneous linear system $AX = B$ has no solution if	A. $ A = 0$ B. $ A \neq 0$ C. Rank (a) = no of variables D. Rank $>$; no of variables
15	If all members of a sequence are real numbers then it is called	A. A.P B. Real Sequence C. G.P D. None of these
16	Question Image	A. $A^2 - 5A + 7I = 1$ B. $2A^2 - 3A + 7I = 0$ C. $A^2 - 5A + I = 0$ D. $A^2 - 5A + 7I = 0$
17	Question Image	
18	If $n(A) = n$ then $n(P(A))$ is	A. $2n$ B. n^2 C. $n/2$ D. 2^n
		A. deduction

19 To draw conclusions from some experiments or few contacts only is called

- B. implication
- C. conjunction
- D. induction

20 The period of $\tan \left[\frac{x}{3} \right]$ is _____

- A. 2π
- B. π
- C. $\frac{\pi}{3}$
- D. $\frac{\pi}{5}$