

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If $f(x) = x^{2/3}$ then $f^{-1}(x)$ at $x = 8$ equals:	A. 8 B. 1/8 C. 1/3 D. 2/3
2	$(a + bi) - c(c + di) =$	A. $(a + b) = (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
3	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
4	$f(x) = x $ is a/an	A. Injective function B. Bijective function C. Surjective function D. Implicit function
5	Question Image	
6	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Overlapping C. Equal sets D. None of these
7	$\cot \theta = \sin 2\theta$ if $\theta =$	
8	Question Image	A. π B. $\pi/6$ C. $\pi/2$ D. 2π
9	A tower subtends an angle of 30° at a point distant d from the foot of the tower and on the same level as the foot of the tower. At a second point, h vertically above the first, the angle of depression of the foot of the tower, is 60° . The height of the tower is	A. $h/3$ B. $h/3d$ C. $3h$ D. $3h/d$
10	Question Image	A. 0 B. 1
11	Question Image	
12	Question Image	A. 5 C. -5 D. none
13	The extraction of a cube root of a given number is a	A. Binary operation B. Unary operation C. group D. multiplicative inverse

14	Question Image	A. Singleton set B. A set with two points C. Empty set D. None of these
15	If n is any positive integer then $n^2 > n + 3$ for	
16	Question Image	
17	Question Image	A. 0 B. 1 D. -1
18	If $x^4 - 10x^2 - 2x + 4$ is divided by $x + 3$, then the remainder is	A. 1 B. 0 C. 4 D. None of these
19	If the roots of $3x^2 + kx + 12 = 0$ are equal then $k =$ _____	
20	For any set X , $X \cup X$ is	A. X B. X' C. Φ D. Universal Set