

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If $a = \{2m/2m < 9, m \in p\}$, the $(n A) =$	A. {2,3,4,5,6,7,8} B. {2,4,6,8.....16} C. {4, 6} D. {2,3,5,7}
2	Any conditional and its contrapositive are	A. Equilavant B. Opposite C. Equal D. Not Equal
3	Question Image	A. hypothesis B. implication C. consequent D. conditional
4	There are _____ basic techniques for solving a quadratic equation	A. Two B. Three C. Four D. None of these
5	$x =$ _____ is in the solution of $2x - 3 < 0$	A. 2 B. -2 C. 3 D. 4
6	Question Image	
7	Question Image	A. Associate law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
8	Matrices $A = [a_{ij}] 2 \times 3$ and $B = [b_{ij}] 3 \times 2$ are suitable for	A. BA B. $A^{>2}</sup>$ C. AB D. $B^{>2}</sup>$
9	Power set of X i.e $P(X)$ _____ under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
10	Question Image	
11	The identity element of a set X with respect to intersection in $P(x)$ is	A. X B. Does not exist C. \emptyset D. None of these
12	Question Image	A. 2 B. 7 C. 8 D. 12
13	Both the roots of the equation $(x - b) (x - c) + (x - c) (x - a) + (x - a) (x - b) = 0$ are always	A. Positive B. Negative C. Real D. None of these
14	If $f(x) = 2x^3 + 1$ then $f^{-1}(0) =$	A. 0 B. 1 C. 6 D. None of these
15	Question Image	A. c/a B. $-c/a$ C. b/a D. $-b/a$
16	Question Image	
17	Question Image	

18 If $\pi \leq x \leq 2\pi$, then $\cos^{-1}(\cos x) =$

- B. $-x$
- C. $1/x$
- D. $-x$

19 The largest possible domain of the function:
 $y = \sqrt{x}$ is:

- A. $(0, \infty)$
- B. 12
- C. $(3, 12)$
- D. $(3, \infty)$

20 The set $\{1, -1\}$ is closed w.r.t.

- A. Addition
- B. Multiplications
- C. Subtraction
- D. None of these