

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If the intersecting plane is parallel to a generator of the cone, but intersects its one nappe only, the curve of intersection is	A. a circle B. an ellipse C. a parabola D. a hyperbola
2	21.256°	A. $21^{\circ}15'21''$ B. $21^{\circ}20'56''$ C. $21^{\circ}25'1''$ D. $21^{\circ}25'6''$
3	The set of second elements of the ordered pairs forming a relation is called a	A. Domain B. range C. function D. relation
4	$4^{1+x} + 4^{1-x} = 10$ is called	A. Reciprocal equation B. Exponential equation C. Radical equation D. None of these
5	In R, the multiplicative inverse of a is	A. 0 B. 1 C. -a D. $1/a$
6	<input type="text" value="Question Image"/>	A. 0 B. -1 C. 1 D. 2
7	<input type="text" value="Question Image"/>	A. 1 B. 0 C. -1 D. 2
8	The equation of the circle with centre at (5, -2) and radius 4 is	
9	n different objects can be arranged taken all at a time in _____	A. $(n + 1)!$ ways B. $(n - 1)!$ ways C. $n!$ ways D. n ways
10	Which of the following is a vector	A. length B. momentum C. volume D. speed
11	Identity w.r.t intersection in a power set of any set is	A. \emptyset B. Set itself C. Singleton set D. $\{0\}$
12	There are n seats round a table numbered 1, 2, 3 n. The number of ways in which m person can take seats is	A. nP_m B. ${}^nC_m \times (m - 1)!$ C. ${}^{n-1}P_m$ D. None of these
13	On simplifying the equation $1 + \cos x / 1 + \sec x$ the result is.	A. Sin x B. Cosec x C. Cos x D. Sec x
14	If the roots of $ax^2 + b = 0$ are real and distinct then	A. $ab > 0$ B. $a = 0$ C. $ab < 0$ D. $a > 0, b > 0$
15	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true

16	The sum of coefficients in the binomial expansion equals to	A. 2 B. 2^{n+1} C. 2^{n-1} D. 2^n
17	Question Image	
18	The roots of the equation $x^2 + 6x - 7 = 0$, are	A. 1 B. 2 C. 1 and -7 D. -7
19	Question Image	A. 1760 B. -193 C. 223 D. none of these
20	Question Image	A. $\frac{\pi}{3}$ B. $\frac{\pi}{4}$ C. $\frac{\pi}{6}$ D. 0