

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
2	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
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $P(A) + P(B)$ B. $P(A) - P(B)$ C. $P(A) \cdot P(B)$ D. $P(A) / P(B)$
4	The value of p for which both the roots of the equation $4x^2 - 20x + (25p^2 + 15p - 66) = 0$ are less than 2, lies in	
5	In a country 55% of the male population has houses in cities while 30% have houses both in cities and in villages find the percentage of the population that has houses only in villages	A. 45 B. 30 C. 25 D. 50
6	If the matrices A and B are conformable for multiplication then $(AB)^t =$ _____	A. AB B. $A^{sup} B^{sup}$ C. $B^{sup} A^{sup}$ D. $A^{sup} B$
7	Given two independent event A and B such that $P(A) = 0.30$ and $P(B) = 0.60$. Probability of getting neither A nor B is	A. 0.28 B. 0.13 C. 0.12 D. 0.42
8	For which of the following ordered pairs (s, t) is $s + t > 2$ and $s - t < -3$?	A. (3, 2) B. (2, 3) C. (1, 8) D. (0, 3)
9	A relation a into B in which Domain is not equal to a, is called.	A. Into function B. on to function C. None of these D. Surjective
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	If $a = 5i + 2j$, then $ a =$	A. $\sqrt{13}$ B. $\sqrt{7}$ C. $1/\sqrt{13}$ D. $\sqrt{29}$
12	The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3 \sin^2 x - 7 \sin x + 2 = 0$ is	A. 0 B. 5 C. 6 D. 10
13	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is	A. 1/6 B. 1/3 C. 1/2 D. 2/3
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 12 B. 13 C. 14 D. 15
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 405 / 256 B. 504 / 259 C. 450 / 263 D. None
16	There are two middle terms in the expansion of $(a+x)^n$ if n is	A. Even +ve integer B. +ve integer C. Odd +ve integer D. All

17	Question Image	A. 0 B. 1 C. -1 D. 2
18	i is equal	A. (1, 0) B. (0, 1) C. (1, 1) D. (0, 0)
19	To each element of a group there corresponds inverse element	A. Two B. One C. No D. Three
20	For two vector a and b, $a+b =$ _____	A. a b B. b+a C. b-a D. None