ECAT Pre Engineering MCQ's Test For Mathematics Full Book

Sr	Questions	Answers Choice
1	If S = {3,6,9,12.......}, then	A. S = Four multiples of 3 B. S = Set of even numbers C. S = Set of prime numbers D. S = All multiples of 3
2	Question Image	D. None of these
3	The sum if 1,3,5,7,9........ up to 20 terms is	A. 400 B. 472 C. 563 D. 264
4	A relation in which the equality is true for all values of the unknown is called _____	A. An identity B. An equation C. A polynomial D. None of these
5	The cube roots of 8 are	
6	The set of complex numbers forms	A. Commutative group w.r.t addition B. Commutative group w.r.t multiplication C. Commutative group w.r.t division D. Non commutative group w.r.t addition
7	If a = 2i +2j, b= 3i -j and c=4i +5j, the 3b -a-2c =	A. -i -15j B. i-15j C. i-3j D. None of these
8	A diagonal matrix in which the diagonal elements are equal is called a	A. Null matrix B. Identity matrix C. Scalar matrix D. Row matrix
9	If the centre of the circle is the origin, then equation of the cirlce is	A. $x^2 + y^2 = 0$ B. $2gx + 2fy - c = 0$ C. $x^2 + y^2 = r^2$ D. $gx + fy - c/2 = 0$
10	The number of triplets (x, y, z) satisfying $\sin^{-1}x + \cos^{-1}y + \sin^{-1}z = 2\pi$ is	A. 0 B. 2 C. 1 D. Infinite
11	Question Image	A. From an empty set B. 1 C. 2 D. >2
12	The point (1,3) is one solution of	A. 3x + 5y > 29 B. 3x + 5y < 7 C. x + 2y < 4 D. x + 4y > 3
13	Question Image	A. additive property B. multiplicative property C. additive identity D. multiplicative identity
14	In R the number of identity elements w.r.t.'.' is	A. One B. Two C. Three D. Four
15	if a_1 =3, d=7 and a_n =59 , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 13
		A. *P* is subset of A

16	*P∉ A means*	B. <i>P</i>is an element of A C. <i>P does not belongs to A</i> D. A does not element of <i>P</i>
17	Φ set is the _____ of all sets	A. Subset B. Union C. Universal D. Intersection
18	The roots of ax2 + bx + c = 0 are always unequal if	A. b2 - 4ac = 0 B. b2- 4ac ≠ 0 C. b2- 4ac > 0 D. b2- 4ac ≥ 0
19	Arithmetic mean between a and b is	
20	Question Image	