ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	C. x²+ 2x + c D. (x²+ 2x -1) ⁴+ c
2	A particle moving in a straight line with velocity V = (4-t2) where t is the line from a fixed point. The acceleration of the particle after 4 sec is.	A. -8 m/ sec² B. -4 m/sec C. -8m/sec D. -4m/sec2
3	If the 4th term in the expansion of $(px + x^{-1})^m$ is 2.5 for all $x \in R$, then	
4	Question Image	A. Three Independent Variables B. Two independent constant C. Three independent parameters D. Three independent constant
5	Question Image	
6	$a.a^{-1} = a^{-1}.a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse
7	Question Image	
8	$\tan^{-1}x > \cot^{-1}x$ holds for	A. x > 1 B. x < 1 C. x = 1 D. All values of x
9	The number of ways of arranging the letter AAAAA BBB CCC D EE F in a row when no two C's are together is	
10	A complex number "1 + i" can also be expressed as"	A. 2(Cos60^o + i sin 30^o) B. Cos 60^o + i sin 60^o C. (Cos 60^o + i sin 60^o) D. Cos 30^o + i sin 30^o
11	Question Image	A. A finite non-empty set B. Null set C. Both a and b D. None of these
12	The solution set of the equation $\tan^{-1}x - \cot^{-1}x = \cos^{-1}(2 - x)$ is	A. [0, 1] B. [-1, 1] C. [1, 3] D. None of these
13	Bisectors of angles of a triangle are:	A. Collinear B. Concurrent C. Perpendicular D. zero
14	For a positive integer n	A. n! = n(n + 1) B. n! = n(n+1)! C. n! = n(n - 1) D. n! = n(n - 1)!
15	$\text{Tan}^{-1}1/x =$ _____	A. sin x B. sec⁻¹X C. cot⁻¹X D. None of these
16	Every real number is	A. A complex number B. A rational number C. A natural number D. A prime number
		A. No solution

17	Question Image	B. One real solution C. More than one real solution D. None of these
18	Question Image	A. Orthogonal B. Involutary C. Idempotent D. Nilpotent
19	If A = {x/x is a positive integer and 4≤x<23}, then A=	A. {1,2,3,4,5,6,7} B. {4,5,6.....22} C. {1,2,3,.....23} D. {1,2,3,4,5}
20	If $S_r$denotes the sum of the first r terms of a G.P., then S_n, S_{2n}- S_n, S_{3n}- $S_{2n}$are in	A. A.P. B. G.P. C. H.P. D. None of these