ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. 1 C. 2 D. 1/2
2	The coefficient of the third term of $(8a-b)^{1/3}$, after simplification is	A. -228 B. 1/288 C. 1/220 D. -1/177
3	The third term of the sequence $a_n = (-1)^{n-1}(n-7)$ is _____	A. 8 B. 4 C. -4 D. 8
4	The solution of differential equation:	A. dy/dx+y/x = x²is : B. 4xy = x⁴+ c C. 4x = x⁴= c D. 4 y = x⁴+ c E. 4x=4x³ + c
5	Question Image	
6	The number of x-intercepts of y= sin x in his period	A. 0 B. 1 C. 2 D. 3
7	Question Image	
8	The curve f(x,y) = 0 has a central symmetry if	A. f(-x,-y)=f(x,y) B. f(x,-y)=f(x,y) C. f(-x,y)=f(x,y) D. f(-x,-y)≠f(x,y)
9	If the trace of matrix A is 5, then the trace of the matrix 3A is	A. 3/5 B. 5/3 C. 8 D. 15
10	The contra positive of p → q is	A. q → p B. ~q→~q C. ~p→~q D. None of these
11	Question Image	A. (a + b)c = ac + bc B. a + b = b + a C. (a + b) + c = a + (b + c) D. a(b +c) = ab + ac
12	(a,0) x (c,0) =	A. (0,ac) B. (ac,0) C. (0,0) D. (a,c)
13	2/9,5/7∈ R,(2⎪9)(5⎪7)=10/63∈R this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
14	Find the geometric mean between 4 and 16	
15	The set of all points in the plane that are equally distant from a fixed point is called a	A. parabola B. ellipse C. hyperbola D. circle
16	Conjunction of two statements p and q is denoted symbolically as	
17	Question Image	
18	Question Image	A. A⁻ B. A^t

18	Question Image	C. -A D. A
19	Question Image	A. images B. pre-images C. constants D. none of these
20	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6