Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A function which is to be maximized or minimized is called an	A. Explicit function B. Implicit function C. Objective function D. None
2	Te order of the differential equation of all conics whose axes coincide with the axes of co-ordinates is	A. 2 B. 3 C. 4 D. 1
3	tan(2π+θ) = _____;	A. tanθ B. -tanθ C. cotθ D. -cotθ
4	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
5	If y = sin (ax + b), then fourth derivative of y with respect to x =	A. a⁴cos (ax + b) B. a⁴sin (ax + b) C. -a⁴sin (ax + b) D. a⁴tan (ax + b)
6	Question Image	A. 6x - 2 + c B. x³- x²+ x + c C. 6x - x²+ c D. 6x³- x²+ c
7	The positive integer just greater than $(1+0.0001)^{10000}$is	A. 4 B. 5 C. 2 D. 3
8	f(x) = 3x/x^2 + 1 is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
9	What is range of the function g (x) =|x-3|?	A. [0 ,∞) B. (0 ,∞) C. (-∞ ,3] D. [0,∞)
10	If distance of (a,b) from origin is 5 then	A. a²+ b²=5 B. a = 5 C. b = 5
11	The set of points {(x,y)|y = f(x), ∀x∈} is called	A. Relation B. Graph of f C. Function D. All are correct
12	(1,0) is in the solution of the inequality	A. 3x + 2y > 8 B. 2x - 3y < 4 C. 2x + 3y > 3 D. x - 2y < -5
13	Question Image	
14	sin 3a = _____;	A. 3sin a - 4sin3a B. 4sin a -3 sin3 a C. 3 cos3 a -cosa D. 4cos3 a - 3cos a
15	Question Image	
16	The A.M. of two numbers is 34 and G.M. is 16, the numbers are	A. 2 and 64 B. 64 and 3 C. 64 and 4

		D. None of these
17	For n€ N,$2^{n>2}$ > n is to only when	A. n<2 B. n≤ 4 C. n≥ 4
18	The slope of the normal at the point (at^2, 2at) of the parabola y^2= 4ax is	A. 1/t B. t C. -t D. -1/t
19	The range of function f(x)=-x2+2x-1 is	A. R B. (-∞,0] C. (-∞,1] D. [0,∞)
20	The point _____ is in the solution of the inequality 2x - 3y < 4	A. (0, -2) B. (1, -3) C. (2, 2) D. (3, 0)