Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$a.a^{-1} = a^{-1}.a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse
2	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
3	Question Image	
4	cos 3a =_____;	A. 3sin a - 4sin3 a B. 4sin a - 3sin3 a C. 3cos3 a - 4cos a D. 4cos3a - 3cos a
5	Which of the following function form 1 to itself are bi-jective	A. F(x) = x + 3 B. F(x) = x⁵ C. F(x) = 3x + 2 D. F(x) = x²+ x
6	The vertex of the equation $y^2 = 4ax$ is:	A. (2, -2) B. (1,1) C. (0 , 0) D. (2 , 2)
7	If f (x) is defined and continuous then f (x) is always	A. Rational function B. Trigonometric function C. Logarithmic function D. All are correct
8	Question Image	
9	Question Image	A. I quadrant B. II quadrant C. III quadrant D. IV quadrant
10	Period of Sine and Cosine function is	A. π B. 2π C. -π D. -2π
11	Cofactor of an element $a_{ij}$is defined by	A. (-1)^{i+j}|A| B. (-1)^{i+j}M_{ij} C. (-1)^{i+j}M⁻¹ D. None of these
12	The periods of the function f(x) = x[x] is	A. 1 B. 2 C. Non periodic D. None of these
13	Question Image	A. additive property B. multiplicative property C. additive inverse

		D. additive identity
14	The sum of the roots of the equation $x^2 - 6x + 2 = 0$ is	A. -6 B. 2 C. -2 D. 6
15	The square matrix A is skew Hermitian when (A)'=	A. A B. A' C. -A D. A
16	Question Image	
17	If $a^x = b^y = c^z$ and a, b, c are in G.P. then x, y, z are in	A. A.P. B. G.P. C. H.P. D. None of these
18	Question Image	
19	Question Image	
20	$i^{(4n+2)}$ = ----------	A. 1 B. i C. -1 D. -i