NAT I General Science

Sr	Questions	Answers Choice
1	d/dx ($3y^4$) =	A. 12y³ dy/dx B. 8y³ C. 8y³ dy/dx D. 12y³
2	Given X, Y are any two sets such that number of elements in X=28, number of elements in set Y=28, and number of elements in set X∪Y=54, then number of elements in set X∩Y=	A. 4 B. 3 C. 2 D. 1
3	The range of inequality x + 2 > 4 is	A. (-1,2) B. (-2,2) C. (1,∞) D. None
4	The complement of set A relative to universal set U is the set	A. {X/X∈ A∧x ∈ U} B. {X/X∉ A∧x ∈ U} C. {X/X∈ A and x ∉ U} D. A-U
5	The associative angle of 280^o is	A. 100^o B. 10^o C. 80^o D. -80^o
6	Sum of integers starting from to n is	A. n(n+1)/4 B. n(n+1)/6 C. n(n+1)/2 D. n(n-1)/2
7	The difference of two consecutive terms of an A.P is called	A. Constant of series B. Common ratio C. Common difference D. General term
8	The angle a (0° < a< 180°) measured counterclockwise from positive x-axis to a non-horizontal straight line / is called the	A. Rotation B. Inclination C. Radian D. None
9	Derivative of strictly increasing function is always	A. Zero B. Positive C. Negative D. Both A and B
10	Which is an explicit function	A. y = x² +2x -1 B. x² +xy +y² =2 C. xy² -y +9/xy =1 D. All are
11	If the diagonal of a square has coordinates (1,2) and(5,6) the length of a side is	A. 3 B. 4 C. 1 D. 5
12	Sin (2π -θ) =_____.	A. Cosθ B. -Sinθ C. -Sinθ D. -cosθ
13	If f_1 (x) and f_2 (x) are any two anti derivatives of a function F (x) then the value of f_1 (x) = f_2 (x)	A. A variable B. A constant C. Undefined D. Infinity
14	The two different parts of the hyperbola are called is	A. Vertices B. Directrices C. Nappes D. Branches
15	Second derivative of y = x^9 + $10x^2$ + 2x -1 at x = 0 is	A. 10 B. 20 C. 12 D. 1

		D. 1
16	If x < y, 2x = A and 2y = B then	A. A =B B. A < B C. A< X D. B < y
17	The common difference of the sequence 7,4,1.....is	A. 1 B. -3 C. 5 D. 0
18	An m x n matrix is said to be rectangular if	A. m = n B. m ≠ n C. mn = 1 D. mn = 0
19	If the sum of the roots of $(a + 1)x^2 + (2a + 3)x + (3a + 4) = 0$ is -1, then product of the roots is	A. 1 B. 2 C. -2 D. -1
20	If 2 Sin x Cos 2 x = Sin x then?	A. X = nπ+ π/6 B. X = nπ +π/3 C. X = nπ +1 D. X = nπ + π/2