NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	Which of the following is the subset of all sets ?	A. A ≠ C B. B = C C. A = B D. A ≠ B
2	Given eight points in a plane no three of which are collinear how many lines do the points determine?	A. 16 B. 64 C. 28 D. 36
3	If the vector 2i+4j-2k and 2i +6j+xk are perpendicular then x-7	A. 4 B. 8 C. 14 D. 7
4	If Sin θ =Cosθ then θ=	A. 30° B. 45° C. 60° D. 90°
5	Sin-1 (√2/2)=?	A. π/2 B. π/3 C. 3π/4 D. 2π
6	Sin (2π -θ) =_____.	A. Cosθ B. -Sinθ C. -Sinθ D. -cosθ
7	The Domain of f(x) = log x is	A. [0,∞] B. (0, ∞) C. [0,∞[D. [∞ ,∞]
8	Which of the following is the equation of a line with slope 0 and passing through the point (4,3)	A. X =4 B. X = -4 C. Y = 3 D. Y = -6
9	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
10	$1/x^2$ -1 = ? (in case of making partial fraction)	A. Ax +B/x² -1 B. A/x + B/ x- 1 C. A/ x+1 + B/x-1 D. None
11	The range of inequality x + 2 > 4 is	A. (-1,2) B. (-2,2) C. (1,∞) D. None
12	Two natural numbers whose sum is 25 and difference is 5, are	A. 25, 20 B. 20, 10 C. 20, 5 D. 15, 10
13	Partial fraction of $1/x^3$-1 will be of the form	A. Conjugate pair B. ordered pair C. reciprocal pair D. quadratic function
14	The nth term of A,P:1,5,9,15.....is given by	A. 4n - 3 B. 4n + 1 C. 3n -4 D. 4n +3
15	In which quadrant is the solution of the equation sin x - 1 = 0	A. II quadrants B. II and III quadrants C. III and Iv quadrants D. I quadrant

16	The cube roots of unity ω = ----------	A. 1-i √-3 / 2 B. -1+i √-3 / 2i C. -1+i √3 / 2 D. 1+i √3 / 2
17	If f (x) = x/x^2- 4 then which is not included in the domain of f(x)	A. 0 B. -2 C. 1 D. 4
18	Period is Tan x/5 is	A. 5π B. 4π C. 2π D. π/5
19	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
20	The point (-5,3) is the center of a circle and P(7,-2) lies on the circle the radius of the circle is	A. 2 B. 13 C. 7 D. 8