NAT I Computer Science Mathematics

Sr	Questions	Answers Choice
1	If sinθ = 1 then θ =	A. 2nπ +π/2 B. 2nπ C. 2π +n D. Nπ +π/2
2	The set {1, -1, i, -i}, form a group under	A. addition B. multiplication C. subtraction D. None
3	Sin x + Cos x=1 x=	A. π B. π/2 C. π/3 D. π/4
4	If p and r are integers P = 0, and p ≠ -r, which of the following must be true?	A. p < r B. p > r C. p + r < 0 D. p - r < -0
5	Sec^{-1} x=	A. Cos⁻¹ 1/x B. Cosec⁻¹ 1/x C. Cos-1 (-x) D. Tan⁻¹ x
6	The magnitude of a vector can never be	A. Zero B. Negative C. Positive D. Absolute
7	The center of a circle of radius 10 is on the origin which of the following points lies with in the circle	A. (10,0) B. (8,8) C. (8,4) D. (0,10)
8	The length of rectangle is twice as much as its breadth. If the perimeter is 120 cm, the length of the rectangle is	A. Same as the original determinant B. Additive inverse of the original determinant C. Both A and B D. Adj of the original matrix
9	The mid point of the line joining (=1,-3) to(3,-5) is	A. (1, 1) B. (1,-1) C. (2, -8) D. (1, -4)
10	The set (Q, .)	A. Infinite set B. Singleton set C. Two points set D. None
11	ω^{88} = ?	A. A and B are multiplicative inverse of each other B. A and B are additive inverses of each other C. A and B are singular matrices D. A and B are equal
12	The sum of the interior angles for a 16 sided polygon is	A. 0 B. ω C. 1 D. 1 / ω
13	How many elements are in the sample space of two rolling dies	A. 6 B. 12 C. 18 D. 36
14	The value of Cos (1/2 Cos^{-1} 1/2) is equal to	A. √3/2 B. -3/4 C. 1/16 D. 1/4
		A. A irrational number

15	0 (zero) is	B. A rational number C. A negative integer D. A positive number
16	If Cosθ =0, Then θ=	A. nπ/2 B. (2n + 1)π/2 C. (2n - 1)π/2 D. (n ±1)π/2
17	The average of first 100 integers is=	A. 50 1/2 B. 25 1/4 C. 100 D. 5050
18	If $f(x) = x^3 - 2x^2 + 4x - 1$, then f(-2) =?	A. 0 B. -25 C. 5 D. 45
19	If the order of A is n x m. Then order of kA is	A. Forms a group B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
20	120° degrees are equal to how many radians?	A. π/3 radians B. 2π/3 radians C. π/4 radians D. π/2 radians