NAT II Physical Science Mathematics

Sr	Questions	Answers Choice
1	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
2	Which of the following is the subset of all sets?	B. {1, 2,3} D. {0}
3	Sin x + Cos x = 1 x =	
4	Question Image	
5	In general matrices do not satisfy	A. Commutative law w.r.t multiplication B. Associative law w.r.t addition C. Distributive law w.r.t addition D. Multiplication of a scalar with the matrix
6	Question Image	
7	Total number of terms in the expansion of $(a + b)^5 + (a - b)^5$ after simplification are	A. 3 B. 1 C. 4 D. 7
8	Question Image	
9	The complement of set A relative to universal set U is the set	D. A - U
10	Question Image	
11	Question Image	A. 0 B. -2 C. 1 D. 4
12	If c is a constant number and if f is the function defined by the equation f(x) = c for all values of x, then f is differentiable at every x and f is defined the equation f(x) = _____	A. f B. 1 C. C D. 0
13	What is a proper rational fraction?	D. All are proper rational fractions
14	Which is in the solution set of 4x - 3y < 2	A. (3, 0) B. (4, 1) C. (1, 3) D. None
15	Question Image	
16	The equation of the normal to the circle $x^2 + y^2 = 25$ at(4, 3) is	A. 3x - 4y = 0 B. 3x - 4y = 5 C. 4x + 3y = 5 D. 4x + 3y = 25
17	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
18	Question Image	A. 1 B. 0 C. -2 D. 3
19	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. X = 2, y = -1 B. X = -2, y = 1 C. X = 2, y = -1 D. X = 2, y = 2
20	Question Image	A. p < r B. p > r C. p + r < 0

D. p - r < 0