

NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	0 (zero) is	A. A irrational number B. A rational number C. A negative integer D. A positive number
2	The set (Q, \cdot)	A. Infinite set B. Singleton set C. Two points set D. None
3	Corola available in 5 models 8 colours and 3 sizes how many Corola must a local dealer have no hand in order to have one of each kind avialable?	A. 24 B. 120 C. 16 D. 39
4	In 30,60,90 triangle if the smallest side is 6 than the side opposite to the angle of 60° is	A. 12 B. 3 C. $6\sqrt{3}$ D. 6
5	Unit vector in the positive direction of x-axis is	A. \hat{i} B. \hat{j} C. \hat{k} D. All
6	The radius of the circle $(x-1)^2 + (y+3)^2 = 64$ is	A. 8 B. $2\sqrt{2}$ C. 4 D. 64
7	In the triangle ΔABC , where C is the right angle $\tan A + \tan B =$	A. A +B B. $\frac{C^2}{AB}$ C. $\frac{A^2}{BC}$ D. $\frac{B^2}{AC}$
8	The number of ways in which we can courier 5 packets to 10 cities is	A. 2×5^0 B. 5^{10} C. 10^5 D. 2^{10}
9	If $f(x) = x^2 - 4$ then which is not included in the domain of $f(x)$	A. 0 B. -2 C. 1 D. 4
10	The fifth term of the sequence $a_n = 3n - 2$ is	A. 3 B. -3 C. 13 D. -13
11	$\sin^{-1}(\frac{\sqrt{2}}{2}) = ?$	A. $\frac{\pi}{2}$ B. $\frac{\pi}{3}$ C. $\frac{3\pi}{4}$ D. 2π
12	$r + 3 > 5$ then which is true	A. $r + 2 > 4$ B. $r + 2 < 4$ C. $r + 2 = 4$ D. None
13	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The student enrolled for English cannot attend any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 20
14	If in isosceles right angled triangle one side is a then hypotenuse is	A. $a\sqrt{2}$ B. $a/2$ C. a D. Cannot be determined by given
15	If A and B are matrices of same order than $(A + B)(A + B) =$	A. addition B. multiplication C. subtraction D. ..

		D. None
16	$\cos 315^\circ =$	A. 0.707 B. 0.5 C. 1 D. 0
17	$\sin^{-1}(-x) =$	A. $\cos^{-1} 1/x$ B. $-\sin^{-1} x$ C. $1/\sin^{-1} x$ D. $\sin^{-1} 1/x$
18	The total cost of 2 apples and 3 oranges is \$1.70, which of the following is true	A. The cost of one apple B. The cost of one orange C. Both have equal cost per item D. Cost of each single item can not be determined
19	In general matrices do not satisfy	A. Not a group B. A group w.r.t. subtraction C. A group w.r.t. division D. A group w.r.t. multiplication
20	Which of the following is not defined?	A. $\arcsin 1/9$ B. $\arccos(-4/3)$ C. $\arctan 11/12$ D. $\operatorname{arccot}(-4)$