NAT II Physical Science Mathematics

Sr	Questions	Answers Choice
1	Question Image	A. 2 B. 1 C. 0
2	If the sum of the roots of the equation $ax^2 - 2x + 2a = 0$ is equal to their product, then the value of a is	A. 1 B. 2 C. 3 D. 4
3	Question Image	
4	The values of n such that, in the binomial expansion of $(1 - x)^n$, co-efficient of x^2, co-efficient of $x^2$is 3, are	A. -2, -3 B. 2, -3 C. -2, 3 D. None of these
5	A fraction in which the degree of the numerator is less than the degree of the denominator is called	A. Polynomial B. Proper fraction C. Rational fraction D. Mixed fraction
6	3/2 is	A. An irrational number B. Whole number C. A positive integer D. A rational number
7	The gradient of the line joining (1, 4) and (-2, 5) is	A. 3/8 B. -2 2/3 C. -1/3 D. 2
8	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
9	If ab > 0 and a < 0, which of the following is negative?	A. b B. -b C. -a D. (a - b)²
10	Which of the vectors have opposite direction?	D. Both A and B
11	Question Image	
12	a + x is	A. A trinomial B. A binomial C. A moomial D. An equation
13	The associative angle of $280^\circ$is	A. 100° B. 10° C. 80° D. -80°
14	The number ways in which 5 distinct toys can be distributed among 3 children is	A. 3⁵ B. 5³ C. C₃⁵ D. P₃⁵
15	Question Image	A. A < G < H B. A > G > H C. A < G > H D. A > G < H
16	Question Image	

17	An angle of one radian is equivalent to	A. 90° B. 60° C. 67° D. 57° 18[']
18	Question Image	A. An equation B. Linear equation C. Rational fraction D. Identity
19	Question Image	
20	The number of ways in which we can courier 5 packets to 10 cities is	A. 2 x 5⁰ B. 5¹⁰ C. 10⁵ D. 2¹⁰