

## NAT II Physical Science Mathematics

Sr	Questions	Answers Choice
1	Question Image	D. None
2	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
3	Question Image	A. 0 B. 1 C. -1 D. 2
4	Question Image	
5	A farmer possesses 100 hectometers of land and wants to grow corn and wheat. Cultivation of corn requires 3 hours per hectometer while cultivation of wheat requires 2 hours per hectometer. Working hours cannot exceed 240. If he gets a profit of Rs. 20 per hectometer for corn and Rs. 20 per hectometer for wheat. The profit function for the farmer is	A. $P(x,y) = 20x + 15y$ B. $P(x,y) = 2x + 3y$ C. $P(x,y) = x + y$ D. $P(x,y) = 3x + 2y$
6	Question Image	
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	Two dice are rolled. The number of possible outcome in which at least one die shows 2 is?	A. 5 B. 12 C. 11 D. 7
9	Question Image	
10	Question Image	
11	Which of the following integrals can be evaluated	
12	If A and B are two events, then $P(A \cup B) = ?$ (when A and B are disjoint)	A. $P(A) - P(B)$ B. $P(A) \times P(B)$ C. $P(A) + P(B)$
13	Question Image	
14	Question Image	
15	A die is thrown. What is the probability that there is a prime number on the top?	A. $1/2$ B. $1/3$ C. $1/6$ D. $2/3$
16	If any two rows (or any two columns) of a square matrix are inter changed, the determinant of the resultant matrix 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
17	The set $\{\{a,b\}\}$ is	A. Infinite set B. Singleton set C. Two points set D. None
18	Question Image	
19	Question Image	A. (0, e) B. (0, 1) D. None
20	Question Image	