

## NAT I Engineering Mathematics

Sr	Questions	Answers Choice
1	The number of diagonals of a six sided figure are	A. 9 B. 6 C. 12 D. 3
2	If $C_r^n, P_r^n = 24:1$ then $r = ?$	A. 1 B. 2 C. 3 D. 4
3	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. $2/3$
4	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. $P(A) + P(B)$ D. $P(A) + P(B) - P(A \cap B)$
5	Two dice are rolled The number of possible out come in which at least one die shows 2 is?	A. 5 B. 12 C. 11 D. 7
6	The number of ways in which we can courier 5 packets to 10 cities is	A. $2 \times 5^{10}$ B. $5^{10}$ C. $10^5$ D. $2^{10}$
7	The average of first 100 integers is=	A. $50 \frac{1}{2}$ B. $25 \frac{1}{4}$ C. 100 D. 5050
8	Sum of integers starting from to n is	A. $n(n+1)/4$ B. $n(n+1)/6$ C. $n(n+1)/2$ D. $n(n-1)/2$
9	The fifth term of the sequence $a_n = 3n - 2$ is	A. 3 B. -3 C. 13 D. -13
10	A sequence of numbers whose reciprocals forms an arithmetic sequence is called	A. Harmonic series B. Arithmetic series C. Harmonic sequence D. Geometric sequence