

Mathematics ECAT Pre Engineering Chapter 10 Mathematical Inductions Online Test

Sr	Questions	Answers Choice
1	The middle term(s) of $(a+x)^{11}$ is	A. 6th term B. 6th or 7th C. 7th term D. 6th and 7th
2	The proposition $S(n)$ for any $n \in \mathbb{N}$ is only true if $k \in \mathbb{N}$ and	A. $S(k+1)$ is true B. $S(1)$ is true and $S(k+1)$ is true whenever $S(k)$ is true C. $S(k+1)$ is true whenever $S(k)$ is true D. $S(k)$ is true
3	The coefficient of x^n in the expansion of $(1-2x)^{-1}$ is	A. $(-1)^n 2^n$ B. 2^n C. $(-1)^{(n+1)} x^n$ D. $(n+1) 2^n$
4	The proposition $S(n)$ is true $\forall n \in \mathbb{N}$, $S(k+1)$ true when _____ is true	A. $S(1)$ B. Both a & c C. $S(k)$ D. None
5	There is no integer n for which $3n$ is	A. Even B. Prime C. Odd D. Real
6	The sum even binomial coefficient of $(3+2x)^5$ is _____ term	A. 16 B. 30 C. 8 D. 32