

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$\cos (180^\circ - \theta) =$	A. $\sin \theta$ B. $-\cos \theta$ C. $-\sin \theta$ D. None of above
2	If n is any positive integer then $n^2 > n + 3$ for	
3	$\cos(3\pi/2 + \theta) =$ _____;	A. $\sin \theta$ B. $\cos \theta$ C. $-\sin \theta$ D. $-\cos \theta$
4	Question Image	
5	For trival solution A is	A. A B. A is non zero C. A = 0 D. None of these
6	An equation containing at least one derivative of a depends variable with respect to independent variable is a (an)	A. Implicit equation B. Differential equation C. General equation D. None of these
7	Question Image	
8	If $a_1 = a_2 = 2$, $a_n = a_{n-1} - 1$ ($n > 2$), then a_5 is	A. 1 B. 0 C. -1 D. -2
9	Question Image	
10	If for the matrix A, $A^5 = 1$, then $A^{-1} =$	A. A^2 B. A^3 C. A D. None of above
11	In set builder notation the set $\{0, 1, 2, \dots, 100\}$ can be written as	A. $\{x / x \in \mathbb{N} \wedge x \leq 100\}$ B. $\{x / x \in \mathbb{W} \wedge x \leq 101\}$ C. $\{x / x \in \mathbb{Z} \wedge x \leq 101\}$ D. The set of first 100 whole numbers
12	$f(x) = 2x^2 + 3x + 5$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
13	$\sin^{-1} x =$ _____	
14	The function sine and Cosine have the closed interval as their range	A. [1, 0] B. [-1, 1] C. [0, 1] D. [-1, 2]
15	$\sin^{-1} x =$	A. $\sin(\pi/2 - x)$ B. $\sin^{-1}(\pi/2 - x)$ C. $\pi/2 - \cos^{-1} x$ D. $\pi/2 + \cos^{-1} x$
16	The range of inequality $x + 2 > 4$ is	A. (-1, 2) B. (-2, 2) C. (1, (34, 34)) D. None

17 Question Image

18 Question Image

19 Question Image

20 The number of terms in the expansion of $(a + x)^{12}$ is

- A. 13
- B. 12
- C. 11
- D. 10