Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The first three terms in the expansion of $(1 - x)^{-3}$ are	A. 1 + 3x + 6x² B. 1 - 3x + 6x² C. -3 - 3x - 6x² D. 1 - 3x - 6x²
2	Question Image	
3	The roots of the equation $ax^2 + bx + c = 0$ are real and equal if	A. b²- 4ac < 0 B. b²- 4ac = 0 C. b²- 4ac > 0 D. None of these
4	If a statement S(n) is true for n = 1 and the truth of S(n) for n = k implies the truth of S(n) for = k + 1, then S(n) is true for all	A. Real numbers n B. Integers n C. Positive integers n D. None of these
5	Question Image	
6	Question Image	
7	The set { {a, b} } is	A. Infinite set B. Singleton set C. Two points set D. Empty set
8	Question Image	A. cos 2x B. 2 cos 2x C. 2 sin2x D. -2 cos2x
9	Question Image	A. 0 B. 1 C. 2 D. 4
10	A non-homogeneous linear system AX = B has no solution if	A. $\|A\| = 0$ B. $\|A\| \neq 0$ C. Rank (a) = no of variables D. Rank > no of variables
11	Corner point of the system $x - y \leq 2, x + y \leq 4, 2x - y \leq 6, x \geq 0, y \geq 0$	A. (1,4) B. (4,2) C. (3,1) D. (4,1)
12	Question Image	A. A B. A' C. U D. None of these
13	Question Image	A. 6 C. 20 D. 0
14	Question Image	D. none of these
15	1/3 is _____	A. A prime number B. An integer C. A rational number D. An irrational number
16	$\cot\theta = \sin 2\theta$ if $\theta =$	
17	(1,0) is in the solution of the inequality	A. 3x + 2y > 8 B. 2x - 3y < 4 C. 2x + 3y > 3 D. x - 2y < -5
18	Question Image	
19	Which one is not defined $\forall n \in Z+$	A. -n! B. n!

19	Which one is not defined ∀n∈Z?	C. (-n)! D. n!+0!=n!+1
20	The radian measure of the central angle of an arc 50 m long on a circle of radius 25 m is	A. 3 B. 2 C. 1