


Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$A = B$ iff	A. All elements of A also the elements of B B. A and B should be singleton C. A and B have the same number of elements D. If both have the same element
2	The set of ordered pairs (x,y) such that $ax+by < c$, and (x,y) such that $ax+by > 0$, are called	A. Half planes B. Boundary C. Linear Inequalities D. Feasible regions
3	The exact value of $\cos^{-1}(0)$ is	A. $\pi/2$ B. $-\pi/2$ C. 3π D. $\pi-\pi/6$
4	In quadratic equation $y=ax^2+bx+c$, if b and c are both zero then the graph is	A. Symmetric w.r.t.y-axis B. Symmetric w.r.t.x-axis C. Straight Line D. Circle
5	Period of $\tan x$ is _____	
6	Sequence also called.....	A. Series B. Function C. progressions D. Elements
7	What is the value of $\cos(\cos^{-1} 2)$?	A. $\sqrt{2}$ B. $1/2$ C. undefine D. 0
8	For each natural number n, n (n+1) is	A. an even B. an odd C. multiple of 3 D. Irrational
9	The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3 \sin^2 x - 7 \sin x + 2 = 0$ is	A. 0 B. 5 C. 6 D. 10
10	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
11	$\tan 360^\circ =$ _____	A. -1 B. 0 C. 1 D. Undefined
12	Question Image	
13	The range of the principle cot function is	
14	The sum of co-efficient in $(1+x-3x^2)^{4163}$ is	A. 0 B. 1 C. -1 D. None
15	Question Image	A. 5 B. 20 C. 9 D. 4
16	Question Image	
17	Question Image	
18		A. 4 B. $1/2$

18 If $\underline{u} = 2a\underline{i} + \underline{j} - \underline{k}$ and $\underline{v} = \underline{i} + a\underline{j} + 4\underline{k}$ are perpendicular then $a =$

- C. 3
- D. $\frac{4}{3}$

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20 The sum of an infinite geometric series exist if

- A. $|r| < 1$
- B. $|r| > 1$
- C. $r = 1$
- D. $r = -1$