Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Every set is an improper subset of	A. Empty set B. Equivalent set C. Itself D. Singleton set
2	Question Image	A. 1 B. -1 C. 0 D. None of these
3	The value of x for which the polynomials x2 - 1 and x2 -2x + 1 vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
4	Name the property used in 100 + 0 = 100	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity
5	What is the period of sin 2x/3 cos 4x=?	A. π B. 2π C. π/2 D. π/3
6	Question Image	
7	If p, q, r and in A.P., a is G.M. between p and q and b is G.M. between q and r, then a^2, q^2, $b^2$are in	A. A.P. B. G.P. C. H.P. D. None of these
8	The set (Z, +) forms a group	A. Forms a group w.r.t addition B. Forms a group w.r.t multiplication C. Non commutative group w.r.t multiplication D. Doesn't form a group
9	Question Image	
10	cos(a-β) = _____;	A. sin a cosβ + cos a sinβ B. sin a cos β - cos a sinβ C. cos a cos β + sin a sinβ D. cos a cosβ - sin a sinβ
11	How many terms of the A.P 3,6,9,12,15.....must be taken to make the sum 108	A. 8 B. 6 C. 7 D. 36
12	The period of cosec 10x is _____	
13	The key for opening a door is in a bunch of 10 keys. A man attempts to open the door by trying the keys at random discarding the wrong key. The probability that the door is opened in the 5th trial is	A. 1 / 10 B. 2 / 10 C. 3 / 10 D. 4 / 10
14	In set builder notation the set {0,1,2,.....100} can be written as	A. {x / xε B ∧ x≤ 100} B. {x / x ∈ W ∧ x < 101} C. {x / x ∈ Z ∧ x < 101} D. The set of first 100 whole numbers
15	If n € N , then n(n+3) is always	A. Multiple of 3 B. Multiple of 6 C. odd D. even
16	14 is not a	A. Prime number B. Whole number C. Even number D. Real number

17	Domain of $\sin\theta$ is	A. Set of real numbers B. Set of complex numbers C. Set of natural numbers D. Set of even numbers
18	x = _____ is in the solution of $2x + 3 \geq 0$	A. 1 B. -2 C. -3 D. -4
19	In the interval $0 \leq x \leq \pi$, the sine is	A. Not a function B. Not defined C. Infinity D. Not one-to-one function
20	A prime number can be a factor of a square only if it occurs in the square at least	A. Once B. Thirce C. Twice D. None of these