Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The greatest integer which divides the number 101^{100}- 1 is	A. 100 B. 1000 C. 10000 D. 100000
2	Cos (α+β) - cos (α-β) =	A. -2 sinα sinβ B. 2 sinα cosβ C. -2 sinα cosα D. 4 sinα cosβ
3	Question Image	A. Rational B. Irrational C. Even D. Odd
4	The equation of motion of a stone thrown vertically up wards is s = ut - 4.9$t^2$the maximum height attained by it =	
5	Such fraction which can not be written in the form ofp⁄q where p,q and q≠ 0,such fractions are called.	A. Fractinal numbers B. Rational Numbers C. Even Numbers D. Whole Numbers
6	The set {1, -1, i, -i}	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
7	Question Image	A. 0 B. 20 C. 90 D. 80
8	Three integers are chosen at random from the first 20 integers. Then probability that their product is even, is	A. 2 / 19 B. 3 / 29 C. 17 / 19 D. 4 / 19
9	Question Image	
10	The slope of the tangent of the circle x^3 + y^3 =25 at (4,3) is:	A. -4/5 B. 4/3 C. -25/4 D. 25/3
11	tan 294° =_____;	A. tan 24° B. -tan 24° C. cot 24°

		D. -cot 24˚
12	The sides of a right angled triangle are in A.P The ratio of sides is	A. 1:2:3 B. 3:4:5 C. 2:3:4 D. 5:8:3
13	Z is the set of integers (Z.*) is a group with a * b = a +b +1, a,b ∈ G.then inverse of a is	A. -a B. a +1 C. -1-a D. None of these
14	The domain of the principle sine function is	
15	the curve of the parabola $y^2 = -4ax$ is symmetric with respect to	A. x -axis B. y - axis C. Botha x and y- axis D. None of thes
16	Question Image	
17	The value of x which is unchanged by the mapping in the function defined by f ; x $x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1
18	Question Image	
19	The mid point of the line segment joining the points A(3,1) and B(-2,-4) is	A. (1, -3)
20	The sum of coefficients in the binomial expansion equals to	A. 2 B. 2ⁿ⁺¹ C. 2ⁿ⁻¹ D. 2ⁿ