Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The probability that a person A will be alive 15 years hence is 5/7 and the probability that another person B will be alive 15 years hence is 7/9. Find the probability that both will be alive 15 years hence	A. 4/63 B. 5/9 C. 45/49 D. None of these
2	If z1 = 2 + 6i and z2 = 3 + 7i then which expression defines the product of z1 and z2	A. 36 +(-32)i B. -36+32i C. 6+(-11)i D. 0, +(-12)i
3	Question Image	D. none of these
4	Some of two real numbers is also a real number , this property is called:	A. Commutative property w.r.t addition B. Closure property w.r.t. addition C. Associative property w.r.t. addition D. Distributive property w.r.t addition
5	14 is not a	A. Prime number B. Whole number C. Even number D. Real number
6	The area of sector with central angle of 1 radian in a circular region whose radius is 2m is	A. 0.5m2 B. 2m2 C. 1m2 D. 4m2
7	Question Image	A. A B. -A C. A^t D. A⁻
8	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. X = 2, y = -1 B. X = -2, y=1 C. X = 2, y = -1 D. X = 2, y = 2
9	Question Image	A. ¹⁰C₆ B. ¹⁰C₅ C. ¹⁰C₄ D. None
10	If ab > 0 and a < 0, which of the following is negative?	A. b B. -b C. -a D. (a - b)²
11	Question Image	
12	Question Image	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
13	Domain of 1+cot2θ=csc2θ is	A. [0,π] B. R-{x/x=nπ,n∈ z} C. (-∞,+∞) D. [-1,1]
14	The equation of the normal to the circle $x^2 + y^2 = 25$ at (4, 3) is	A. 3x - 4y =0 B. 3x - 4y =5 C. 4x + 3y = 5 D. 4x + 3y = 25
15	A box containing 10 mangoes out of which 4 are rotter. Two mangoes are taken together from the box. If one of them is found to be good, the probability that the other is also good is	A. 1 / 3 B. 8 / 15 C. 5 / 13 D. 5 / 9
16	Name the property used in 4 + 9 = 9 + 4	A. Associative property of addition B. Commutative property of addition C. Distributive property D. Additive identity

17	In-radius is denoted by	A. r B. η C. r2 D. R
18	The line 2x +√6y =2 is a tangent to the curve x2 -2y2 =4 The point of contact is	A. (√6,1) B. (2,3) C. (7,-2√6) D. (4,-√6)
19	The angle of elevation of the tops of two towers at the middle point of the line joining the foots of the tower are $60^{o}$and 30^{o}respectively. The the ratio of the heghts of the tower is	A. 2 : 1 B. 3 : 1 C. 1 : 2 D. 1 : 3
20	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