Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The equation $ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0$ represents an ellipse if	
2	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
3	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 = -i D. x = 2, y = 2
4	Given two numbers a and b. Let A denote the single A.M. between these and S denote the sum of n A.M.'s between them. Then S/A depends upon	A. n, a, b B. n, a C. n, b D. n
5	Question Image	A. Singular B. Non-singular C. Adjoint D. None of above
6	Question Image	
7	The matrix A is Hermitian when (A)' =	A. A B. -A C. A D. A'
8	Question Image	
9	Question Image	A. Closure law of addition B. Associative law of addition C. Commutative law of multiplication D. Associative law of multiplication
10	The number of x-intercepts of y= sin x in his period	A. 0 B. 1 C. 2 D. 3
11	If the roots of $3x^2+kx + 12 = 0$ are equal then k = _____	
12	Question Image	A. 1 B. 2 C. 3
13	Domain of 3 sin x is _____	A. [-3, 3] B. R C. Positive real numbers D. None of these
14	The total number of subsets that can be formed out of the set {a, b, c} is	A. 1 B. 4 C. 8 D. 12
15	Question Image	A. An empty set B. Universal set C. A singleton set D. None of these
16	If a, b, c are in A.P., then 3^a, 3^b, 3^c are in	A. A.P. B. G.P. C. H.P. D. None of these
17	Considering Cosine Rule of any triangle ABC, possible measures of angle A includes	A. Angle A is obtuse B. Angle A is acute C. Angle A is right-angle

		D. <span style= font-size: 0.95em;">All of above
18	The set of the first elements of the orders pairs forming a relation is called its	A. Relation in B B. Range C. Domain D. Relation In A
19	The set { 1 , -1} is closed w.r.t.	A. Addition B. Multiplications C. Subtraction D. None of these
20	The formula an = arn-1represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these