Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Let the equation $ax^2 - bx + c = 0$ have distinct real roots both lying in the open interval (0, 1) where a, b, c are given to be positive integers. Then the value of the ordered triplet (a, b, c) can be	A. (5, 3, 1) B. (4, 3, 2) C. (5, 5, 1) D. (6, 4, 1)
2	Sin-1(-x)=	A. x B. -x C. -sin-1 x D. cos-1 x
3	A square matrix A = [aij] is lower triangular matrix when	A. aij = 0 for all i<j B. bij = 0 C. cij = 0 D. dij = 0
4	A fixed point which lies on the axis of the cone is called its:	A. axis B. apex C. plane D. diameter
5	3x + 4 > 0 is	A. equation B. identity C. inequality D. none of these
6	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
7	If in the expansion of $(1+x)^n$, co-efficients of 2nd, 3rd and 4th terms are in A.P., then x=	A. 4 B. 5 C. 6 D. 7
8	∀ a ε R ∃ o ε R such that a + v = 0 + a = a is property of	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse
9	Question Image	
10	Question Image	A. A.P. B. G.P. C. H.P. D. None of these
11	If the lower limit of an integral is a constant and the upper limit is a variable, then the integral is a	A. Constant function B. Variable value C. Function of upper limit D. All
12	The product of cube roots of unity is	A. Zero B. 1 C. -1 D. None of these
13	Sum of n terms of a geometric series if | r | < 1 is	
14	A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is	A. 1/2 B. 2/3 C. 1/3 D. 2/5
15	Question Image	A. 15 B. 9 C. 7 D. 8
16	$(51)^4$is equal to	A. 7065201 B. 8065201 C. 6765201 D. 6565201

17	Question Image	D. none of these
18	Question Image	A. x C. y
19	The set of the first elements of the orders pairs forming a relations is called its	A. Relation in B B. Range C. Domain D. Relation in A
20	Associative law of multiplication	A. ab = ba B. a(bc) = (ab) c C. a(b+c) = ab + ac D. (a + b)c = ac + bc