Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The set of all points in the plane that are equally distant from a fixed point to called a	A. Parabola B. ellipse C. Hyperbola D. Circle
2	How many signals can be given by 5 flags of different colours, using 3 flags at a time	A. 120 B. 60 C. 24 D. 15
3	If z_1= 2 + 6i and z_2= 3 + 7i, then which expression defines the product of $z_1$and z_2?	A. 36 + (-32)i B. -36 + 32i C. 6 + (-11)1 D. 0, +(-12)i
4	Question Image	
5	Every natural number is	A. A prime number B. An irrational number C. An integer D. An even number
6	The multiplicative inverse of 2/3 is	A. 3/2 B. -2/3 C. -3/2 D. 1
7	Question Image	D. None of these
8	If l, m, n are the d.c.'s of a line, then	A. l2+ m2+ n2= 0 B. l2+ m2+ n2= 1 C. l + m + n = 1 D. l = m = n = 1
9	The modulus of a vector i-i+ k is:	A. √3 B. 1 C. √2 D. ∞
10	Question Image	A. The law of consines B. The law of sines C. The law of tangents D. None of these
11	In R, the multiplicative identity is	A. 0 B. 1 C. -1 D. None
12	The value of cos(cos-1 1/2) is	A. 1/2 B. √3/2 C. -1/2 D. 1/√2
13	An equation containing at least one derivative of a depends variable with respect to independent variable is a (an)	A. Implicit equation B. Differential equation C. General equation D. None of these
14	Which of the following ordered pair is a solution of the inequality x+2y<6?	A. (2,3) B. (2,2) C. (6,0) D. (1,1)
15	Question Image	A. Closure law of addition B. Closure law of multiplication C. Commutative law of addition D. Commutative law of multiplication
16	Identity w.r.t intersection in a power set of any set is	A. ⌀ B. Set itself C. Singleton set D. {0}

17	The additive inverse of a matrix A is	D. None of these
18	Maximum value of z =15x +20y subject to 3x+ 4y≤ 12,x,y≥ 0 is given by	A. 46 B. 60 C. 50 D. 70
19	Question Image	
20	If a_1= 3, r = 2, then the nth term of the G.P. is	A. 2.3ⁿ⁻¹ B. 3.2ⁿ C. 3.2ⁿ⁺¹ D. 3.2ⁿ⁻¹