Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
3	f(x) = $3x^4 - 2x^2 + 7$ is:	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
4	The number of real tangents that can be drawn to the ellipse $3x^2 + 5y^2 = 32$ passing thro. (3, 5) is	A. 0 B. 1 C. 2 D. Infinite
5	Question Image	A. A B. A' C. U D. None of these
6	The set {-1, 1} is	A. Group under the multiplication B. Group under addition C. Does not form a group D. Contains no identity element
7	The angle of depression of a point A on the ground from the top of the tower is 30□,then the angle of elevation of the top of the tower at the point A is	A. 60□ B. 40□ C. 41□ D. 30□
8	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
9	5 unbiased coins coins are tossed simultaneously. The probability of getting at least one head is	A. 1 / 32 B. 31 / 32 C. 1 / 16 D. None of these
10	Question Image	
11	The expansion $(1 + x)^{-3}$holds when	A. |x| > 1 B. |x| < 1 C. x < 1 D. x > 1
12	For $f(x) = x^2 + px + 1$, if f(3) = 3 then P =	A. 3/7 B. -2/5 C. -7/5 D. -7/3
13	Question Image	A. 3x²+ 2 B. 3x²+ 2x + 3 C. x³+ x² D. none of these
14	Question Image	
15	A function of the form p(x)/Q(x) is called:	A. Rational function B. Logarithmic function C. Exponential function D. Hyperbolic function
16	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
17	Name the property used in 100 + 0 = 100	A. Additive inverse B. Multiplicative inverse C. Additive identity

		D. Multiplicative identity
18	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
19	Question Image	
20	If a=5j + 2j,b=2i -3j, then|a+2b|=	A. √21 B. √97 C. √39 D. None of these