Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
2	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
3	p, q, r and s are integers. If the A.M. of the roots of x2- px + q2= 0 and G.M. of the roots of x2- rx + s2= 0 are equal, then	A. q is an odd integer B. r is an even integer C. p is an even integer D. s is an odd integer
4	$2x^3 + 3x + 9$ is a _____	A. Polynomial of degree 3 B. Quadratic equation C. Cubic equation D. Polynomial of degree 2
5	The distance between the points (2, 2) and (3, 3) is	A. 10 C. 5 D. 2
6	Question Image	A. 2 b B. 2 a C. 2 ab D. a + b
7	Question Image	A. 0 B. U C. u/2 D. log u
8	If A is a non-singular matrix then adj A is	A. Non-singular B. Symmetric C. Singular D. Non defined
9	Question Image	
10	The equation $(\cos p - 1)x^2 + x(\cos p) + \sin p = 0$ in the variable x, has real roots, then p can take any value in the interval	A. (0, 2π) B. (-π, -0) C. (0,π) D. None of these
11	If $\sin\alpha$ and $\cos\alpha$ are the roots of the equation $px^2 + qx + r = 0$, then	A. p²- q²+ 2pr = 0 B. (p + r)²= q²- r² C. p²+ q²- 2pr = 0 D. (p - r)²= q²+ r²
12	For trival solution |A| is	A. A B. |A| is non zero C. A = 0 D. None of these

13	In R, the multiplicative identity is	A. 0 B. 1 C. -1 D. None
14	If a +b +c =0 then which of the following is true	A. a =b =c =0 B. a,b =b,c =c,a C. a xb=b xc =c xa D. None
15	The sum of first n even number is	A. n2 B. n(n+1) C. n+1 D. n+2
16	The property used in -3 <-2 ⇒0 <1	A. Commutative property B. Additive property of inequality C. Additive inverse D. Additive identity
17	Question Image	B. ln(x²- x + 1) + c D. ln(2x - 1) + c
18	Question Image	A. 9 B. -9 C. 0 D. 1
19	Question Image	
20	The domain of the function y = sin x , is	A. -π/2≤ x≤ π/2 B. π/ ≤ x≤ π C. -2π ≤ x≤ 2π D. -1 ≤ x≤ 1