Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Any point, where f is neither increasing nor decreasing and f(x) = 0 at that point, is called a	A. Minimum B. Maximum C. Stationary point D. Constant point
2	*i* =	A. √1 B. √2 C. √-2 D. √-1
3	Period of sec x is _____	
4	The horizontal distance between the two towers is 60 m. the angular elevation of the top of the taller tower as seen from the top of the shorter one is 30°. If the height of the taller tower is 150 m, the height of the shorter one is	A. 116 m B. 200 m C. 216 m D. None of these
5	If the domain of the function f: x□ $2x^3$+ 1 is {-1,2,3}, the range of the function is	A. {3,2,5} B. {1,3,9} C. {-1,-2,-3} D. {3,9,19}
6	If z1 = 2 + 6i and z2 = 3 + 7i then which expression defines the product of z1 and z2	A. 36 +(-32)i B. -36+32i C. 6+(-11)i D. 0, +(-12)i
7	Question Image	
8	The sum of the roots of the equation x2 -6x +2 = 0 is	A. -6 B. 2 C. -2 D. 6
9	The circle $(x - 2)^2$+ $(y + 3)^2$= 4 is not concentric with the circle	A. (x - 2)²+ (y + 3)²= 9 B. (x + 2)²+ (y - 3)²= 4 C. (x + 2)²+ (y - 3)²= 8 D. (x - 2)²+ (y + 3)²= 5
10	Question Image	A. Hermitian matrix B. Skew-hermitian matrix C. Symmetric matrix D. Identity matrix
11	A Geometric Series is divergent only if	A. |r|>1 B. |r|≥1 C. |r|=1 D. None of these
12	Question Image	A. x³⁹ B. 40x³⁹ C. 40x⁴¹ D. none of these
13	The centre of the conic x2 +16x +4y2 -16y +76 =0 is	A. (0,10) B. (-8,4) C. (-8,-2) D. (1,1)
14	Sequence also called.....	A. Series B. Function C. progressions D. Elements
15	Question Image	B. 6x + 2 + c C. 6x + x²+ c D. 6x³+ x²+ x
		A. [0,<span style="color: rgb(34, 34,

		34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);">∞] B. (0,∞) C. [0,∞[D. [∞,∞]
16	The domain of f(x) = log x is	
17	An observer on the top of a cliff 200 m above the sea level, observes the angles of depression of two ships on opposite sides of the cliff to be 45° and 30°, respectively. The distance between the ships if the line joining them points to the base of cliff is	
18	sin(π/2+θ) = _____;	A. sinθ B. cosθ C. -sinθ D. -cosθ
19	Question Image	A. 1 B. 12 C. 5 D. 29
20	The probability that a slip of numbers divisible by 4 is picked from the slips of number 1,2,3,4,.....10 is	A. 1/5 B. 2/5 C. 1/10 D. 3/10