

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The area of sector with central angle of 1 radians in a circular region whose radius is 2 m is	
2	If n is any positive integer then $4^n > 3^n + 4$ is true for all	
3	For non-trivial solution $ A $ is	A. $A = 0$ B. $A \leq 0$ C. $ A = 0$ D. None of these
4	A function which is to be maximized or minimized is called an	A. Explicit function B. Implicit function C. Objective function D. None
5	If $4 - x > 5$, then	A. $x \geq 1$ B. $x \geq -1$ C. $x \leq 1$ D. $x \leq -1$
6	An indicated sum of terms of a sequence is represented by	A. S_n B. a_n C. $S(n)$ D. $\{S_n\}$
7	The maximum value of $12 \sin \theta - 9 \sin^2 \theta$ is	A. 3 B. 4 C. 5 D. None of these
8	The equation of the circle with centre $(-3, 5)$ and radius 7 is	A. $(x+3)^2 + (y+5)^2 = 7^2$ B. $(x-3)^2 + (y-5)^2 = 7^2$ C. $(x+3)^2 + (y+5)^2 = 7^2$ D. $(x+3)^2 + (y-5)^2 = 7^2$
9	If we have a statement "if p then q" then q is called	A. Conclusion B. Implication C. Unknown D. Hypothesis
10	Question Image	A. $(x^3 - 3x^2 + 8x + c)$ B. $3x^2 - 6x + c$
11	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
12	An integral of $1/x$ dx is:	A. $1/x^2$ B. $1/-x^2$ C. $1/\ln x$ D. $\ln x$
13	The expansion of $(1 + 2x)^{-2}$ is valid if	A. $ x \leq 1/2$ B. $ x \leq 1$ C. $ x \leq 2$ D. $ x \leq 3$
14	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
15	The solution of equation $x^2 + 2 = 0$ in the set of real number is	A. Infinite set B. Singleton set C. Null set D. None of these

16 Question Image B. r^3
C. r
D. none

17 Question Image

18 The vertex of the graph of the quadratic function $f(x) = x^2 - 10$, is A. (0, -10)
B. (-10,0)
C. (10,0)
D. (0,10)

19 Question Image

20 Question Image