

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $x = 1/x$ for $x \in \mathbb{R}$ then the value of x is	A. ± 1 B. 0 C. 2 D. 4
2	If $\cos \alpha = 4/5$, then $\cos \alpha/2$	
3	The tangents drawn from the point P to a circle are real and distinct if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
4	The set which has no proper subset is	A. $\{0\}$ B. $\{\}$ C. $\{\emptyset\}$ D. None of these
5	$x = -1$ is in the solution of the inequality	A. $x + 5 < 0$ B. $2x + 3 < 0$ C. $x > 0$ D. $2x + 3 > 0$
6	The number of words that can be formed out of the letters of the word ASSASSINATION is	
7	The set $\{\mathbb{Z} \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
8	u, v, w and $u \times (v \cdot w)$ are	A. Equal B. Parallel C. Additive immense of each other D. Meaningless
9	The decimal fraction in which we have finite number of digits in its decimal part is called.	A. recurring decimal fraction B. Non terminating fraction C. Non recurring fraction D. terminating decimal fraction
10	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = xy + 2$ D. All are
11	A prime number can be a factor of a square only if it occurs in the square at least	A. Once B. Thirce C. Twice D. None of these
12	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
13	If $y = e^{ax} \sin bx$ and $y^2 - 2ay + (a^2 + b^2)y = 0$ the for what values of a and b we have $y^2 + 10y + 34 = 0$	A. $a = -10, b = 34$ B. $a = -5, b = 3$ C. $a = 5, b = 3$ D. $a = 10, b = 34$
14	$\cos 315^\circ =$ _____	
15	Every subset of a finite set is	A. Disjoint B. Null C. Finite D. Infinite
16	Archimedes approximate the function by horizontal function and the area under f by the sum of small	A. Parallelograms B. Squares C. Retangles D. Polygons

17	One degree is denoted by	<p>A. 1°</p> <p>B. 1'</p> <p>C. 1"</p> <p>D. 1 rad</p>
18	Name the property used in $100 + 0 = 100$	<p>A. Additive inverse</p> <p>B. Multiplicative inverse</p> <p>C. Additive identity</p> <p>D. Multiplicative identity</p>
19	The interval in which $f(x)=x^3-6x^2+9x$ is increasing	<p>A. $1 < x < 3$</p> <p>B. $x < 1$ and $x > 3$</p> <p>C. $x \geq 1$ and $x \leq 3$</p> <p>D. $-\infty < x < \infty$</p>
20	The square root of every incomplete square is an	<p>A. Rational numbers</p> <p>B. Even numbers</p> <p>C. odd numbers</p> <p>D. Irrational numbers</p>