

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If the roots of $ax^2 + b = 0$ are real and distinct then	A. $ab > 0$ B. $a = 0$ C. $ab < 0$ D. $a > 0, b > 0$
2	If (0, 0) and (0, -1) are end points of a diameter, then the equation of the circle is	
3	Number of ways of writing the letters of WORD taken all at a time is	A. 24 B. 4 C. 12 D. 6
4	A quadratic equation in x is an equation that can be written in the form	A. $ax^2 + b = 0$ B. $ax^3 + b^2 + c = 0$ C. $ax^2 + bx + c = 0$ D. $ax^3 + bx^3 + cx = 0$
5	The proposition $S(n)$ is true $\forall n \in \mathbb{N}, S(k+1)$ true when _____ is true	A. $S(1)$ B. Both a & c C. $S(k)$ D. None
6	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. $\pi$ B. $\frac{\pi}{6}$ C. $\frac{\pi}{2}$ D. $2\pi$
7	The 5th and 13th terms of an A.P are 5 and -3 respectively The first term of the A.P is	A. 1 B. -15 C. 9 D. 2
8	If A and B are two disjoint events then	A. $P(A \cup B) = P(A) + P(B)$ B. $P(A \cup B) = P(A) - P(A \cap B)$ C. $P(A \cup B) = P(A) \text{ or } P(B)$ D. None
9	Question Image <input style="width: 100%; height: 20px;" type="text"/>	
10	What is the circular measure of the angle between the hands of a watch at 4 O'clock	
11	Three integers are chosen at random from the first 20 integers. Then probability that their product is even, is	A. $\frac{2}{19}$ B. $\frac{3}{29}$ C. $\frac{17}{19}$ D. $\frac{4}{19}$
12	The set of all points in the plane that are equally distant from a fixed point is called a	A. Parabola B. ellipse C. Hyperbola D. Circle
13	Question Image <input style="width: 100%; height: 20px;" type="text"/>	A. W

14	The symbol of irrational is	B. N C. Q D. Q'
15	If $a \neq 0$ , $b \neq 0$ and $ a+b = a-b $ , then vectors a and b are:	A. Parallel to each other B. Perpendicular to each other C. Inclined at $60^\circ$ D. neither parallel nor perpendicular
16	Question Image	
17	The 26th term of the A.P -2,-4,10,.....is	A. 136 B. -136 C. 148 D. -148
18	Question Image	
19	If $Z_1 = 1 + i$ , $Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
20	The value of x which is unchanged by the mapping in the function defined by $f(x) = x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1