

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Domain of $\operatorname{cosec} \theta$ is	
2	Question Image <input type="text"/>	A. 56 B. 7 C. 8 D. 8/7
3	$3x + 4 > 0$ is	A. equation B. identity C. inequality D. none of these
4	The equation of the circle with centre (h, k) and radius r is	A. $(x + h)^2 + (y + k)^2 = r^2$ B. $(x + h)^2 + (y - k)^2 = r^2$ C. $(x - h)^2 + (y + k)^2 = r^2$ D. $(x - h)^2 + (y - k)^2 = r^2$
5	Question Image <input type="text"/>	
6	Question Image <input type="text"/>	
7	A number A is called the arithmetic mean between a and b if a, A, b is _____	A. Arithmetic sequence B. Geometric sequence C. Harmonic sequence D. Arithmetic sequence
8	The value of $\sin 28^\circ \cos 17^\circ + \cos 28^\circ \sin 17^\circ$ is	
9	Riaz, Saba, Maria, Shehzad are to give speeches in a class. The teacher can arrange the order of their presentation in	A. 4 ways B. 12 ways C. 256 ways D. 24 ways
10	The equation of the circle with (-1, 1) and radius 2 is	
11	If $a^x = b^y = c^z$ and a, b, c are in G.P. then x, y, z are in	A. A.P. B. G.P. C. H.P. D. None of these
12	Three numbers are chosen random without replacement from {1, 2, 3, ..., 10}. the probability that minimum of the chosen numbering is 3 or their maximum is 7	A. 7 / 40 B. 5 / 40 C. 11 / 40 D. None of these
13	The roots of $ax^2 + bx + c = 0$ are	A. Rational $\Leftrightarrow b^2 - 4ac \geq 0$ B. Irrational $\Leftrightarrow b^2 - 4ac > 0$ C. Real $\Leftrightarrow b^2 - 4ac \neq 0$ D. Rational $\Leftrightarrow b^2 - 4ac = 0$
14	Question Image <input type="text"/>	
15	Power set of X i.e P(X) _____ under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
16	If $f(x) = x^3 - 2x^2 + 4x - 1$, then $f(-2) = ?$	A. 0 B. -25 C. 5 D. 45
17	The real number system contains.	A. Positive Numbers B. Negative numbers C. Zero D. (option a, b and c)
18	$2x^3 + 3x + 9$ is a _____	A. Polynomial of degree 3 B. Quadratic equation C. Cubic equation

C. Cubic equation
D. Polynomial of degree 2

19 Order (or sense) of an inequality is changed by multiplying or dividing its each side by a:

A. Zero
B. one
C. negative constant
D. Non negative constant

20 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°
D. neither parallel nor perpendicular