

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A polynomial of arbitrary degree	A. $f(x) = 0$ B. $f(x) = x$ C. $f(x) = a$ D. $f(x) = ax + b, a \neq 0$
2	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
3	$(A \cap B) \subset C =$ -----	A. $A \cup B \subset C$ B. $A \cup B$ C. $A \cap B$ D. None of these
4	Find the geometric mean between 4 and 16	
5	The sum of the roots of the equation $x^2 - 6x + 2 = 0$ is	A. -6 B. 2 C. -2 D. 6
6	Question Image	B. $\sin 2x + c$ C. $-\sin 2x + c$
7	0.25 is _____	A. An irrational number B. A natural number C. A prime number D. A rational number
8	For two vector a and b, $a+b =$ _____	A. a b B. b+a C. b-a D. None
9	The constant distance of all points of the circle from its centre is called the	A. Radius of the circle B. Secant of the circle C. Chord of the circle D. Diameter of the circle
10	Range of $y = \sec x$ is	A. $-1 \leq y \leq 1$ B. $y \geq 1$ or $y \leq -1$ C. $y \leq 1$ or $y \geq -1$ D. $-\infty < y < +\infty$
11	$\sin(a-90^\circ) =$ _____;	A. $\sin a$ B. $\cos a$ C. $-\sin \theta$ D. $-\cos a$
12	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)
13	Both the roots of the equation $(x-b)(x-c) + (x-c)(x-a) + (x-a)(x-b) = 0$ are always	A. Positive B. Negative C. Real D. None of these
14	Question Image	
15	In 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 student enrolled for English cannot attend 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
16	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. $\pm 1$ D. 0 E. Does not exist

17	Question Image	
18	Question Image	A. 3 B. 1 C. 4
19	The sum of co-efficient in $(1+x-3x^2)^{4163}$ is	A. 0 B. 1 C. -1 D. None
20	Question Image	A. $\cos 3x + c$ B. $-\cos 3x + c$