

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	A conditional is regarded as false only when the antecedent is true and consequent is	A. True B. False C. Known D. Unknown
2	Question Image	A. 8 C. 4 D. 64
3	$\csc(-\pi/2) =$ _____;	A. 0 B. 1 C. -1 D. Undefined
4	Domain of $\cot x$ is _____	
5	The domain of the principle sine function is	
6	If $b_1, b_2, b_3, \dots$ are in G.P. with first term unity and common ratio $r$ , then the minimum value of $b_1 - b_3 + b_5$ is equal to	A. $3/4$ B. $1/4$ C. 1 D. None of these
7	If the 4th term in the expansion of $(px + x^{-1})^m$ is $2.5$ for all $x \in R$ , then	
8	Question Image	A. 6, -12, -18 B. -6, 4, 9 C. -6, -4, -9 D. -6, 12, 18
9	Question Image	A. A rational number B. An irrational number C. An odd number D. A prime number
10	Question Image	A. $2x + 2y$ B. $4 - x^2 - y^2$ C. $-x/y$ D. $x/y$
11	The domain of an infinite sequence is a	A. Set of natural numbers B. R C. Subset of N D. None of the above
12	if $A = \{x/x \in Q \wedge 0 < x < 1\}$ , the A is	A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers
13	Question Image	A. -1 B. 0 C. 1 D. undefined
14	Question Image	
15	$3.5 + 5.4 = 5.4 + 3.5 = 8.9$ this property of addition is called	A. additive identity B. associative property C. commutative property D. closure property
16	The distance $s$ of a particle in time $t$ is given by $s = t^3 - 6t^2 - 4t - 8$ . Its acceleration vanishes at $t =$	A. 1 B. 2 C. 3 D. 4
17	Question Image	A. 0.9 B. 0.74 C. 0.2016 D. None of these
18	Question Image	

19

Question Image

- A. 1
- B. 0
- C. -1
- D. 2

20

The interval in which  $f(x)=x^3-6x^2+9x$  is increasing

- A.  $1 < x < 3$
- B.  $x < 1$  and  $x > 3$
- C.  $x \geq 1$  and  $x \leq 3$
- D.  $-\infty < x < \infty$