

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 0 B. 1 C. -1 D. None
2	Given two numbers a and b. Let A denote the single A.M. between these and S denote the sum of n A.M.'s between them. Then S/A depends upon	A. n, a, b B. n, a C. n, b D. n
3	In the interval $0 \leq x \leq \pi$, the sine is	A. Not a function B. Not defined C. Infinity D. Not one-to-one function
4	If we have a statement "if p then q" then q is called	A. Conclusion B. Implication C. Unknown D. Hypothesis
5	Question Image	
6	The number of significant numbers which can be formed by using any number of the digits 0, 1, 2, 3, 4 but using each not more than once in each number is	A. 260 B. 356 C. 410 D. 96
7	Question Image	B. $\ln(x^2 - x + 1) + c$ D. $\ln(2x - 1) + c$
8	$ax + by < c$ is linear inequality in	A. four variables B. three variables C. two variables D. one variable
9	The angle of depression of a point A on the ground from the top of the tower is 30° , then the angle of elevation of the top of the tower at the point A is	A. 60° B. 40° C. 41° D. 30°
10	Multiplying each side of an inequality by (-1) will:	A. Not effect B. Change the sign C. Become zero D. Not defined
11	If $uv = \text{Proj}_v u$ then	A. U and v are parallel B. v is a unit vector C. U is a unit vector D. Both b and c
12	The equations of the line thro' the point (2, 3, -5) and equally inclined to the axis are	
13	Question Image	A. 0 B. 1 C. 2
14	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. $73 / 120$ B. $83 / 120$ C. $67 / 120$ D. $43 / 120$
15	Question Image	
16	For all points (x,y) on y-axis	A. x is positive B. $x = 0$ C. x is negative D. $y = 0$
17	$\sin^2 \pi/6 + \sin^2 \pi/3 + \tan^2 \pi/4 =$ _____;	A. 1 B. 2 C. 3 D. 4

A. $(+\infty, +\infty)$

18 Range of $\cot \theta$ is

34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"><i>∞</i>to -<i>∞</i>)
B. (-1 to +1)
C. (-5 to +5)
D. Set of even numbers only

19 For all positive integral value of n , $3^n < n!$, when

A. $n \geq 6$
B. $n \leq 6$
C. $n \leq 11$
D. $n \geq 11$

20 The angle of elevation of the top of a tree from a point 17 meters from its foot is 42° . The height of the tree is

A. 12m
B. 21m
C. 17m
D. 15m