

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If (a, b) is the mid-point of a chord passing thro' the vertex of the parabola $y^2 = 4x$, then	A. $a = 2b$ B. $2a = b$ C. $a ² >= 2b$ D. $2a = b ²$
2	<input type="text" value="Question Image"/>	
3	The sum of the coefficient in the expansion of $(a + x)^5$ is	A. 32 B. 16 C. 8 D. 5
4	<input type="text" value="Question Image"/>	
5	The sum of the squares of three distinct real numbers, which are in G.P., is S^2 . if their sum is αS then	
6	<input type="text" value="Question Image"/>	
7	<input type="text" value="Question Image"/>	A. Singular B. Non-singular C. Adjoint D. None of above
8	The set of first elements of the ordered pairs in a relation is called its	A. domain B. range C. relation D. function
9	If $a = 5i + 2j$, then $ a =$	A. $\sqrt{13}$ B. $\sqrt{7}$ C. $1/\sqrt{13}$ D. $\sqrt{29}$
10	Which of the following integrals can be evaluated	
11	The consecutive terms of a progressions are 30, 24, 20. The next term of the progression is	
12	The geometrical representation of a linear function is	A. Circle B. Parabola C. Straight lie D. None of these
13	The first three terms in the expansion of $(1 - x)^{-3}$ are	A. $1 + 3x + 6x ²$ B. $1 - 3x + 6x ²$ C. $-3 - 3x - 6x ²$ D. $1 - 3x - 6x ²$
14	$\sqrt{25}$ is a number	A. Rational B. Irrational C. Natural D. Odd
15	The key for opening a door is in a bunch of 10 keys. A man attempts to open the door by trying the keys at random discarding the wrong key. The probability that the door is opened in the 5th trial is	A. $1 / 10$ B. $2 / 10$ C. $3 / 10$ D. $4 / 10$
16	If $y=f(x)$ is a function then y is called	A. dependent variable B. independent variable C. constant D. none of these
17	For all positive integral value of n, $3^n < n!$, when	A. $n > 6$ B. $n \leq 6$ C. $n \leq 11$ D. $n > 11$
18	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these

19 $\cos(\pi/2-\theta) = \underline{\hspace{2cm}}$;

- A. $\cos\theta$
- B. $\sin\theta$
- C. $-\cos\theta$
- D. $-\sin\theta$

20 

- A. 1
- B. 0
- C. 3
- D. -1