

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Right angled B. Obtuse angled C. Isosceles D. Equilateral
2	The positive real number which is the measure of the length of a vector is called the	A. Unit vector B. Modulus C. Inverse D. None of these
3	The value of the expression $\sin\theta + \cos\theta$ lies between	
4	$\sin 50^\circ - \sin 70^\circ + \sin 10^\circ$ is equal to	A. 1 B. 0 C. 1/2 D. 2
5	For Cosine Rule of any triangle ABC, b^2 is equal to	A. $a^2 + c^2 - 2ac \cos B$ B. $a^2 + c^2 + 2ac \cos A$ C. $a^2 + c^2 - 2ac \cos A$ D. $a^2 + c^2 + 2ac \cos B$
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
7	The number of points of intersection of two curves $y = 2 \sin x$ and $y = 5x^2 + 2x + 3$ is	A. 0 B. 1 C. 2 D. None of these
8	Which one is not defined $\forall n \in \mathbb{Z}^+$	A. $-n!$ B. $n!$ C. $(-n)!$ D. $n! + 0! = n! + 1$
9	The value of $\sin^2 20^\circ + \sin^2 70^\circ$ is equal to	A. 1 B. 2 C. -1 D. 1/2
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. -1 C. 5 D. 2
11	Roots of the equation $x^2 + 2x + 3 = 0$ are	A. Real and equal B. Real and distinct C. Complex

C. Complex

D. None of these

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Question Image

- A. 2^x
- B. $2^x \ln x$
- C. $2^x \ln 2$

13

Question Image

14

The roots of the equation $x^2 + 6x - 7 = 0$, are

- A. 1
- B. 2
- C. 1 and -7
- D. -7

15

Question Image

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Question Image

- B. $6x + 2 + c$
- C. $6x + x^{2/3} + c$
- D. $6x^{3/2} + x^{2/3} + c$

17

Period of $\cos 2x$ is _____

18

Question Image

- A. 1
- B. 2
- C. 3
- D. 4

19

If S_n is a definite number as $n \rightarrow \infty$, then the geometric series is

- A. Convergent
- B. Divergent
- C. Oscillatory
- D. None of these

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The numbers $G_1, G_2, G_3, \dots, G_n$ are called n geometric means between a and b if $a, G_1, G_2, G_3, \dots, G_n, b$ are in

- A. H.P.
- B. A.P.
- C. G.P.
- D. None of these