

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The eccentricity of the parabola $y^2 = -8x$ is	A. -2 B. 2 C. -1 D. 1
2	Question Image	
3	Question Image	A. A B. B C. U D. None of these
4	Derivative of $\sin x$ w.r.t. $\sin x$ is	A. 0 B. 1 C. $\sin x$ D. $\cos x$
5	The slope of the normal at $(5 \cos \theta, 5 \sin \theta)$ to the circle. $x^2 + y^2 = 25$ is:	A. $\tan \theta$ B. $\cos \theta / \sin \theta$ C. $-\cot \theta$ D. $-\tan \theta$
6	If the roots of $3x^2 + kx + 12 = 0$ are equal then $k =$ _____	
7	The additive inverse of $2/3$ is	A. $3/2$ B. $-2/3$ C. $-3/2$ D. 0
8	Every irrational number is	A. A real number B. A prime number C. A natural number D. An integer
9	The process of finding the unknown elements in triangle is called the	A. solution of the triangle B. Mean difference C. Engineering distance D. angle of depression
10	Question Image	
11	A non-homogeneous linear system $AX = B$ has no solution if	A. $ A = 0$ B. $ A \neq 0$ C. Rank (a) = no of variables D. Rank \geq no of variables
12	Which of the following is a vector.	A. distance B. temperature C. energy D. acceleration
13	a _____ quantity is one that possesses both magnitude and direction.	A. Scalar B. Vector C. Segment D. None of these
14	$120^\circ =$ _____	
15	Question Image	A. $\cos x$ B. $\sec x \tan x$ C. $\sec^2 x$ D. $-\csc^2 x$
16	Question Image	
17	$(a+bi) - (c+di) =$	A. $(a+b) = (c+d)$ B. $(a+c) + i(b+d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
18	Question Image	
19	When rational fraction is separated into partial fractions, the result is	A. an identity B. A fraction

19 When rational fraction is separated into partial fractions, the result is

- C. A partial sum
- D. Improper fraction

20 The number of terms in the expansion of $(a + b)^9$ is

- A. 10
- B. 11
- C. 9
- D. 12