

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. sec 5x + c B. - sec 5x + c
2	8 . 7 . 6 . 5 in factorial form is	
3	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0, +(-12)i$
4	The constant distance of all points of the circle from its centre is called the	A. radius of the circle B. secant of the circle C. chord of the circle D. diameter of the circle
5	$f(x) = x^3 - x/x^2 + 1$ is :	A. an even function B. an odd function C. an even and implicit function D. neither even nor a odd
6	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
7	The solution set of trigonometric equation contains	A. one element B. two elements C. three elements D. Infinite elements
8	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
9	$(a-1)^{-1} =$	A. a-1 B. a C. -a D. None of above
10	Question Image	A. $x = 3$ B. $x = 1/5$ C. $x = 0$ D. None of these
11	Question Image	A. 360° B. 180° C. 90° D. None of these
12	How many arrangements of the letters of the word MATHEMATICS can be made	
13	The number of arbitrary constants in the general solution of a differential equation is equal to the different equation	A. Order B. Degree C. Variables D. All are correct
14	Question Image	A. 0 D. undefined
15	Question Image	B. 1 C. 2 D. -2
16	Question Image	
17	Parametric equation of circle : $x^2 + y^2 = r^2$, are	A. $r^1 = x \cos \theta$ $r^{\sup 2} = y \sin \theta$ B. $x = r \cos \theta$ $y = r \sin \theta$ C. $x = r \sin \theta$ $y = r \cos \theta$ D. $x = r^{\sup 1} \cos \theta$ $y = r^{\sup 2} \sin \theta$
		A. 5

- 18 If a force $F = 2i + j + 3k$ acts at point $(1, -2, 2)$ of a body then the moment of F about a point lying on the line of action of the force is
- B. Equal to the moment of the force about origin
C. 0
D. Cannot be found
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- 19 $x = \underline{\hspace{2cm}}$ is in the solution of $2x - 5 > 0$
- A. 0
B. 2
C. -2
D. 3
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- 20 $(1, 1)$ is the in the solution of the inequality
- A. $3x + 4y > 3$
B. $2x + 3y < 2$
C. $4x = 3y > 5$
D. $2x - 3y > 2$