

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	<input type="text" value="Question Image"/>	
2	In any triangle ABC, with usual notation $\sin \beta =$ ____;	A. $b \sin \alpha$ B. $b \sin \beta$ C. $a \sin \alpha$ D. None of these
3	For each even natural number n (n^2-1) is divisible by	A. 6 B. 3 C. 4 D. 8
4	Equation of the chord of contact to the tangents drawn from $(-3,4)$ to the circle $x^2 + y^2 = 21$	A. $-3x + 4y = 21$ B. $4x - 3y = 0$ C. $-3x + 4y = 25$ D. None of these
5	The line through the focus and perpendicular to the directrix is called _____ of the parabola	A. axis B. focal chord C. tangent D. latus rectum
6	If the angle between two vectors \underline{u} and \underline{v} is 0 or π , then the vectors \underline{u} and \underline{v} are:	A. Orthogonal B. Collinear C. Perpendicular D. None of these
7	<input type="text" value="Question Image"/>	D. none of these
8	If $z_1 = \sqrt{-36}$, $z_2 = \sqrt{-25}$, $z_3 = \sqrt{-16}$ then	A. 15 B. $15i$ C. $-15i$ D. -15
9	The tangents drawn from the point P to a circle are real and coincident if	A. P is on the circle B. P is inside the circle C. P is outside the circle D. none of these
10	<input type="text" value="Question Image"/>	
11	<input type="text" value="Question Image"/>	
12	If one end of the diameter of the circle $x^2 + y^2 - 5x = 3y - 22 = 0$ is $(3,4)$ the other end is:	A. $(2,7)$ B. $(-2,-7)$ C. $(-2,7)$ D. $(2,-7)$
13	<input type="text" value="Question Image"/>	
14	$f(x) = 2x^2 + 3x + 5$ is a	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function
15	_____ invented a symbolic way to write the statement "y is a function of x" as $y = f(x)$	A. Leibniz B. Newton C. Euler D. None of these
16	<input type="text" value="Question Image"/>	B. $\tan 3x + c$ C. $\cot 3x + c$ D. $-\cot 3x + c$
17	The vertices of the ellipse $x^2 + 4y^2 = 16$ are	
18	If $2x^{1/3} + 2x^{-1/3} = 5$, then x is equal to	A. 1 or -1 B. 2 or 1/2 C. 8 or 1/8 D. 4 or 1/4
19	The centre of the circle $x^2 + y^2 + 12x - 10 = 0$ is	A. $(12, -10)$ B. $(6, -5)$ C. $(-12, 10)$

D. $(-6, 5)$

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A rule that assigns to each elements x in X a unique element y in Y is called a

- A. domain
- B. range
- C. function
- D. none of these