

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	a chord passing through the focus of a parabola is called a:	A. Focal chord B. Latus rectum C. Tangent D. Directrix
2	If e, e' be the eccentricities of two conics S=0 and S'=0 and if $e^2 + e'^2 = 3$ then both S and S' can be	A. Hyperbola B. Parabolas C. Ellipses D. None of these
3	Roots of the equation $x^2 - 7x + 10 = 0$ are	A. {2, 5} B. {-2, 5} C. {2,5} D. {-2,-5}
4	If a statement S(n) is true for n = i where i is some natural number and the truth of S(n) for n = k > i implies the truth of S(n) for n = k + 1 then S(n) is true for all positive integers	
5	Domain of $y = \cot x =$ _____	
6	π is the period of the function	A. $ \sin x + \sin x $ B. $\sin^4 x + \cos x$ C. $\sin(\sin x) + \sin(\cos x)$ D. None of these
7	$\sin(\alpha + \beta) - \sin(\alpha - \beta) =$	A. $4 \cos \alpha \sin \beta$ B. $2 \cos \alpha \sin \beta$ C. $4 \cos \alpha \cos \beta$ D. $4 \sin \alpha \sin \beta$
8	Question Image	A. 2 B. -3/2 C. 1 D. 0
9	An even function is symmetric about the line	A. $y = x$ B. $x = 0$ C. $y = -x$ D. $y = 0$
10	Question Image	D. all
11	A relation in which the equality is true only for some values of the known is called _____	A. An identity B. An equation C. A polynomial D. None of these
12	If $D = \{a\}$, the $P(D) =$	A. {a}

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C. {a}
D. {a}
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13	<input type="text" value="Question Image"/>	A. $a \sec(ax + b) + c$ B. $-a \sec(ax + b) + c$
14	<input type="text" value="Question Image"/>	C. $x^2 + 2x + c$ D. $(x^2 + 2x - 1)^4 + c$
15	Domain of tangent function is	
16	<input type="text" value="Question Image"/>	
17	<input type="text" value="Question Image"/>	
18	<input type="text" value="Question Image"/>	A. Lies between 4 and 7 B. Lies between 5 and 9 C. Has no value between 4 and 7 D. Has no value between 5 and 9
19	An improper rational fraction can be reduced by division to a	A. Proper fraction B. Polynomial C. mixed form
20	θ and $2k\pi + \theta$ are the _____ angles	A. Quadrantal angles B. Coterminal C. Allied D. None