

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	120° degrees are equal to how many radians?	
2	Inverse of the function $y=10x$ is	A. $y=\log x$ B. $y=\ln x$ C. $x=10y$ D. $x=10y$
3	The set of real roots of the equation $\log_{(5x+4)}(2x+3)^3 - \log_{(2x+3)}(10x^2+23x+12) = 1$ is	A. $\{-1\}$ B. $\{-3/5\}$ C. Empty set D. $\{-1/3\}$
4	For any set B, $B \cup B'$ is	A. Is set B B. Set B' C. Universal set D. None of these
5	Question Image	
6	If d_1 is the distance between (0,0) and (1,2) and d_2 is the distance between (0,0) and (-1,-2) the	A. $d_1 < d_2$ B. $d_1 > d_2$ C. $d_1 = d_2$ D. none of these
7	Question Image	A. $\cos x$ B. $\sec x \tan x$ C. $\sec^2 x$ D. $-\operatorname{cosec}^2 x$
8	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	
9	In natural logarithm the base is	A. 1 B. 0 C. 10 D. e
10	If $\sin \theta$ and $\cos \theta$ are the roots of the equation $ax^2 - bx + c = 0$, then a, b, c satisfy the relation	A. $b^2 - 4ac = 2ac$ B. $A^2 - 4ac = 2ac$ C. $A^2 + b^2 = c^2$ D. $B^2 + a^2 = 2ac$
11	Question Image	A. x^{x-1} B. a^{x-1} C. x in a D. $a^{x-1} \ln a$
12	Question Image	
13	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
14	If $x - 1$ is a factor of $x^4 - 5x^2 + 4$ then other factor is	A. $(x+2)^2(x-1)$ B. $(x+2)(x-1)^2$ C. $(x+2)(x^2-x-2)$ D. $(x+2)^2(x-1)^2$
15	Question Image	A. 1 B. -1 C. 0 D. I
16	The period of $ \sin 2x $ is	A. $\pi/2$ B. $-\pi/2$ C. π D. $\pi/3$

17	Question Image	
18	If A and B are two sets then any subset R of $A \times B$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
19	$3x + 4 = 0$ is	A. not inequality B. equation C. identity D. inequality
20	$Q \cup Q' =$	A. Q B. Q' C. N D. R