

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The exact degree value of the function $\sin^{-1}(-\sqrt{3}/2)$ is	A. 70° B. 50° C. 90° D. 60°
2	$3x + 4 < 0$ is	A. inequality B. equation C. identity D. not inequality
3	The different of $\tan x$ is	A. $\sec^2 x$ B. $\ln \sec x $ C. $\sec^2 x dx$ D. $-\cos^2 x$
4	for $n \in \mathbb{N}$, $3^{2n} + 7$ is divisible by	A. 7 B. 8 C. 9 D. 10
5	Question Image	
6	Question Image	A. Biconditional B. Implication C. Antecedent D. Hypothesis
7	If t is the parameter for one end of a focal chord of the parabola $y^2 = 4ax$, then its length is	
8	The distance of a moving particle at any instant t is $x = 3t^2 + 1$ then velocity of particle at $t = 10$ is	A. 50 cm/sec B. 60 cm/sec C. 61 cm/sec D. None of these
9	Five engineering, four mathematics, two chemistry books are placed on a table at random. The probability that the books of each kind are all together is	
10	If $f(x) = \tan x$ then $f(0)$ is	A. 0 B. 1 C. $1/2$
11	For trival solution $ A $ is	A. A B. $ A $ is non zero C. $A = 0$ D. None of these
12	Question Image	
13	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
14	A function from X to Y is written as	B. $f : X \text{ to } Y$ D. $f : Y \text{ to } Y$
15	A function f is said to be an even if $f(-x) =$	A. 0 B. 1 C. $f(x)$ D. $-f(x)$
16	Question Image	
17	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. $2 / 13$ B. $4 / 13$ C. $5 / 13$ D. $8 / 13$
18	$1/3$ is _____	A. A prime number B. An integer C. A rational number D. An irrational number

19

Question Image

A. $-\cot 4x + c$

B. $\cot 4x + c$

C. $\tan 4x + c$

D. $-\tan 4x + c$

20

Question Image