

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The period of $2 \cos x$ is	A. 30π B. 7π C. 5π D. 2π
2	The roots of the equations will be equal if $b^2 - 4ac$ is	A. Positive B. Negative C. 1 D. Zero
3	The magnitude of vector $a 2i - 7j$ is	A. $\sqrt{23}$ B. $\sqrt{43}$ C. 3 D. $\sqrt{53}$
4	If the line $2x - y + k = 0$ is a diameter of the circle $x^2 + y^2 + 6x - 6y + 5 = 0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
5	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
6	Question Image	
7	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
8	Question Image	
9	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
10	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
11	Question Image	A. a B. $2a$ C. $3a$ D. $4a$
12	Question Image	A. Associate law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
13	In R , the multiplicative inverse of a is	A. 0 B. 1 C. $-a$ D. $1/a$
14	If $a_1 = a_2 = 2$, $a_n = a_{n-1} - 1$ ($n > 2$), then a_5 is	A. 1 B. 0 C. -1 D. -2
15	The number of permutations of n objects of which there are n_1 like of one kind, n_2 like of the second kind and n_3 like objects of third kind are	
16	The function $\{f(x,y) y = ax^2 + bx + c\}$ is	A. One-one function B. Constant function C. Onto function D. Quadratic function
17	The product of the four fourth roots of unity is	A. 0 B. 1 C. i D. $-i$

C. -1
D. None of these

18 $x = \underline{\hspace{2cm}}$ is in the solution of $2x - 5 > 0$

A. 0
B. 2
C. -2
D. 3

19 The locus of the centre of a circle which touches two given circles externally is:

A. a hyperbola
B. an ellipse
C. a circle
D. a parabola

20 

A. Always negative
B. Zero
C. Always positive
D. Infinity