

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $A(x_1, y_1)$, $B(x_2, y_2)$ and $C(x_3, y_3)$ are the vertices of a triangle then its centroid is	
2	The matrix A is Hermitian when $(A)' =$	A. A B. -A C. A D. A'
3	Z is the set of integers, $(z, *)$ is a group with $a * b = a + b + 1$, $a, b \in G$. then inverse of a is	A. -a B. a + 1 C. -2 -a D. None of these
4	The line $y = 2x + c$ is a tangent to the parabola $y^2 = 16x$ if c equals	A. -2 B. -1 C. 0 D. 2
5	A person standing on the bank of a river observes that the angle subtended by a tree of the opposite bank is 60° , when he retreats 40 m from the bank, he finds the angle to be 30° . The height of the tree and the breadth of the river are	
6	Optimize means _____ a quantity under certain constraints	A. Minimize B. Maximize C. Maximize or minimize D. None of these
7	$i =$	A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$
8	If the roots of $ax^2 + bx + c = 0$ ($a > 0$) be greater than unity, then	A. $a + b + c = 0$ B. $a + b + c > 0$ C. $a + b + c < 0$ D. None of these
9	If $z_1 = 1 + 2i$, $z_2 = 3 + 4i$ then	A. $z_1 > z_2$ B. $z_1 < z_2$ C. $z_1 = z_2$ D. None of these
10		A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
11		
12	There is no integer n for which 3n is	A. Even B. Prime C. Odd D. Real
13		
14	The line through the centre and perpendicular to the transverse axis is called the	A. Major axis B. Minor axis C. Focal axis D. Conjugate axis
15	A conditional is regarded as false only when the antecedent is true and consequent is	A. True B. False C. Known D. Unknown
16		
17		A. A is proper subset of B B. A is an improper subset of B C. A is equivalent to B D. B is subset of A

18	$w^{28} + w^{38} = \underline{\hspace{2cm}}$	A. 0 B. 1 C. w D. -1
19	In R the number of identity elements w.r.t. '!' is	A. One B. Two C. Three D. Four
20	$\forall a, b, c \in R, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
