

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $Z_1 = 1 + i$, $Z_2 = 2 + 3i$, then $ Z_1 - Z_2 = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
2	How many signals can be given by 5 flags of different colours, using 3 flags at a time	A. 120 B. 60 C. 24 D. 15
3	In \mathbb{R} , the multiplicative inverse of a is	A. 0 B. 1 C. $-a$ D. $1/a$
4	Question Image	A. quadratic function B. constant function C. trigonometric function D. linear function
5	Question Image	
6	If n is any positive integer, then $2 + 4 + 6 + \dots + 2n =$	A. $2^{n+1} - 1$ B. $2^{n+1} + 1$ C. $n^{n+1} + 1$ D. $n(n+1)$
7	Question Image	
8	Which of the following is the subset of all sets	A. Φ B. $\{1, 2, 3\}$ C. $\{\Phi\}$ D. $\{0\}$
9	Question Image	A. $a = a$ B. $a \leq a$ C. $a \geq a$ D. $a < 2 \leq a$
10	If the cutting plane is slightly tilted and cuts only one nappe of the cone, the intersection is	A. an ellipse B. a hyperbola C. a circle D. a parabola
11	If $4 \sin^2 \theta = 1$, then values of θ are	
12	$(x^3 - 1/2x)^6$ is	A. $15/16 x^{>2}</sup>$ B. $2/13 x^{>2}</sup>$ C. $17/7 x^{>2}</sup>$ D. $16/15 x^{>2}</sup>$
13	One degree is denoted by	A. $1^{>0}</sup>$ B. $1'$ C. $1''$ D. 1 rad
14	For any set B , $B \cup B'$ is	A. Is set B B. Set B' C. Universal set
15	Let the equation $ax^2 - bx + c = 0$ have distinct real roots both lying in the open interval $(0, 1)$ where a, b, c are given to be positive integers. Then the value of the ordered triplet (a, b, c) can be	A. (5, 3, 1) B. (4, 3, 2) C. (5, 5, 1) D. (6, 4, 1)
16	If the roots of $ax^2 + bx + c = 0$ are equal in magnitude but opposite in sign, then	A. $a = 0$ B. $b = 0$ C. $c = 0$ D. None of these
17	Question Image	

A. Less than 1

18	Question Image	B. Equal to 1 C. Greater than 1 but less then 2 D. Greater then or equal to 2
19	The value of $\sin 28^\circ \cos 17^\circ + \cos 28^\circ \sin 17^\circ$ is	
20	If $Z = (1,2)$, then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2 ,0.4) C. (0.2,-0.4) D. (-0.2,-0.4)