

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The centre of the conic $x^2 + 16x + 4y^2 - 16y + 76 = 0$ is	A. (0, 10) B. (-8, 4) C. (-8, -2) D. (1, 1)
2	If $e > 1$, then the conic, is:	A. Ellipse B. Parabola C. Hyperbola D. None of these
3	If (2, 3) and (2, 5) are end points of a diameter of a circle, then the centre of the circle is	A. (2, 4) B. (4, 8) C. (0, 2) D. (0, -2)
4	If the equation $x^2 + 2x - 3 = 0$ and $x^2 + 3x - k = 0$ have a common root then the non - zero value of k is	A. 1 B. 3 C. 2 D. 4
5	$\forall a, b, c \in \mathbb{R}, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
6	$ab > 0$ and $a > 0$ then	A. $a > b$ B. $a < b$ C. $a = b$ D. None
7	If $C = \{p/p < 18, p \text{ is a prime number}\}$, then $C =$	A. {2,3,4,.....17} B. {2,4,6,8,.....16} C. {1,3,5,7,9,11,13,15,17} D. {3,6,9,12,15}
8	Period of Cotangent function is	A. π B. $-\pi$ C. 0 D. $-\pi$
9	The number of ways of arranging the letter AAAAA BBB CCC D EE F in a row when no two C's are together is	
10	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
11	If $\cos \alpha = 4/5$, then $\cos \alpha/2$	
12	A stationary point x is a relative extrema of $y = f(x)$ is	A. $f''(x) > 0$ B. $f''(x) < 0$ C. $f''(x) \neq 0$ D. $f''(x) = 0$
13	$x^2 + x - 5 = 0$ is	A. A polynomial B. An inequality C. An identity D. None
14	$n(n - 1)(n - 2)$ in factorial form is	
15	If $A \subseteq B$ then $A \cup B$ is	A. A B. B C. A' D. $A \cap B$
16	Question Image <input style="width: 200px; height: 20px;" type="text"/>	A. (x, y) B. (kx, y) C. (x, ky) D. (kx, ky)
		A. 0

17	probability of a certain event is	B. -1 C. 1 D. ∞
18	Question Image <input type="text"/>	A. 6 B. 360 C. 120 D. 24
19	Write the first four terms of the sequence if $a_n = (-1)^n n^2$	A. -1, 4, -9, 16 B. 1, -4, 9, 16 C. 1, 4, 9, 16 D. None of these
20	Question Image <input type="text"/>	A. Orthogonal B. Involutary C. Idempotent D. Nilpotent