

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	If $n \in \mathbb{Z}^+$ then $(a+x)^n$ is a/an	A. Finite series B. Convergent series C. Infinite series D. Divergent series
3	Three dice are thrown together. The probability of getting a total of at least 6 is	A. $103 / 108$ B. $10 / 216$ C. $93 / 108$ D. None of these
4	The span of a standard parabola depends upon	A. x B. a C. y D. $y^2$
5	The measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the radius of the circle is	A. $1^{\sup}0^{\sup}$ B. 1' C. 1" D. 1 rad
6	Question Image	A. $Y = -x \log x - x + c$ B. $Y = x \log x + x$ C. $Y = x \log x - x + c$ D. None of these
7	Question Image	
8	The number of proper subset of $A = \{a, b, c, d\}$ is	A. 3 B. 6 C. 8 D. 15
9	$(x-1)$ is a factor of	A. $2x^{\sup}3^{\sup} - 3x^{\sup}2^{\sup} + 9$ B. $2x^{\sup}3^{\sup} - 5x - 8$ C. $48x^{\sup}2^{\sup} - 46x - 9$ D. $x^{\sup}9^{\sup} - 1$
10	The Domain of $y = \sin x$ is _____	A. Set of real numbers B. Rational C. Irrational no. D. None of above
11	$2\cos^2 a/2 =$ _____;	A. $1 + \sin a$ B. $1 - \sin a$ C. $1 + \cos a$ D. $1 - \cos a$
12	The polynomial $x - a$ is a factor of the polynomial $f(x)$ if and only if	A. $f(a)$ is positive B. $f(a)$ is negative C. $f(a) = 0$ D. None of these
13	If $x, y, z$ are the $p$ th, $q$ th, $r$ th terms of an A.P. and also of G.P., then $x^y \cdot y^z \cdot z^x$ equals	A. $xyz$ B. 0 C. 1 D. None of these
14	Question Image	
15	$w^{-1} =$ _____	A. 0 B. 1 C. w D. $w^{\sup}2^{\sup}$
16	Name the property used in $100 + 0 = 100$	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity
17	Question Image	

18		A. 5 B. 10 C. 20 D. 30
19	If $f(x) = x^2 - x$ then $f(1)$ is	A. 0 B. 1 C. 2 D. 3
20		A. 20 B. 10 C. 0 D. None of these