

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $f(x) = a_0 + a_1x + a_2x^2 + a_3x^3 + \dots + a_{n-1}x^{n-1} + a_nx^n$ then $f(n)(x)$ is equal to	A. $n!$ B. $ann!$ C. 0 D. $an$
2	If $x^3 + 4x^3 - 2x + 5$ is divided by $x - 1$ , then the remainder is	A. 8 B. 6 C. 4 D. None of these
3	A coin is tossed. If head comes up, a die is thrown but if tail comes up, the coin is tossed again. The probability of obtaining a head and an even number is	A. $1/8$ B. $2/8$ C. $3/8$ D. None of these
4	In the expansion of $(a + x)^n$ the sum of exponents of $a$ and $x$ in each term of the expansion is	A. $n + 1$ B. $n - 1$ C. $n$ D. $2n$
5	For graphing a linear inequality, solid line is drawn if the inequality involves the symbols:	A. $>$ or $<$ ; B. $<u>>$ ; $</u>$ or $<u><$ ; $</u>$ C. $=$ or $\neq$ D. $=$ or $>$ ;
6	$a > b \Rightarrow a + c > b + c$ is known as	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
7	<a href="#">Question Image</a>	
8	The discriminant of the quadratic equation $ax^2 + bx + c = 0$ is	A. $b^2 - 4ac$ B. $b^2 - 4ac$ C. $4ac - b^2$ D. $a^2 - 4ac$
9	<a href="#">Question Image</a>	A. 0 B. 1 C. -1 D. none of these
10	<a href="#">Question Image</a>	A. Polynomial B. Equation C. Improper rational fraction D. Proper rational fraction
11	<a href="#">Question Image</a>	A. A natural number B. A rational number C. An irrational number D. A whole number
12	Equation of parabola with focus $F(-3, 1)$ directrix $x=3$ is	A. $(y - 1)^2 = -12x$ B. $(y - 1)^2 = 4x$ C. $(x + 3)^2 = 4a(y - 1)$ D. $y^2 = -12(x - 1)$
13	The set $\{a, b\}$ is	A. Infinite set B. Singleton set C. Two points set D. None
14	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
15	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
16	Through how many radians does the hour hand of a clock turn in one hour	A. N and W

17	There is no element common in	B. E and W C. N and O D. Q and Q'
18	Question Image	A. 1 B. 0 C. 3 D. -1
19	Tan 3x tan 2x-tan x is equal to	A. Tan x tan 2x tan 3x B. -tan x tan 2x tan 3x C. Tan x tan 2x - tan - tan x tan 3x - tan 2x tan 3x D. None of these
20	The square root of every incomplete square is an	A. Rational numbers B. Even numbers C. odd numbers D. Irrational numbers