

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	A. 1 B. 0 C. -1 D. 2
2	Order (or sense) of an inequality is changed by multiplying or dividing its each side by a:	A. Zero B. one C. negative constant D. Non negative constant
3	$i =$	A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$
4	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
5	The process of finding the unknown elements in triangle is called the	A. solution of the triangle B. Mean differnece C. Engineering distance D. angle of depressin
6	If $a_1 = a_2 = 2$ , $a_n = a_{n-1} - 1$ ( $n > 2$ ), then $a_5$ is	A. 1 B. 0 C. -1 D. -2
7	The roots of $(b-c)x^2 + (c-a)x + a - b = 0$ are equal if	A. $2b = a + c$ B. $2a = b + c$ C. $2c = a + b$ D. $a + b + c = 0$
8	If $\alpha, \beta$ are the roots of $ax^2 + bx + c = 0$ , the equation whose roots are doubled is	A. $ay^2 + 2by + c = 0$ B. $ay^2 + 2by + 4c = 0$ C. $ay^2 + 2by + c = 0$ D. $ay^2 + by + 4c = 0$
9	$F(x) = x^x$ decreases in the interval	A. (0, e) B. (0, 1) C. $(-\infty, 0)$ D. None
10	Question Image	A. 0 B. 1 C. 2 D. 4
11	Question Image	
12	$5x^3 + 3x - 1$ is a _____	A. Polynomial of degree 3 B. Polynomial of degree 2 C. Polynomial of degree 1 D. Polynomial of degree 0
13	The third term of a G.P. is the square of first term. If the second term is 8, then the 6th term is	A. 120 B. 124 C. 128 D. 132
14	Question Image	
15	If $a_n = 2n - 3$ , write the first four terms	A. -3, -1, 1, 3 B. 1, 3, 5, 7 C. -1, 1, 3, 5 D. None of these
16	Question Image	A. 1 B. -i C. i D. 2

D. 0

17 Roots of the equation  $9x^2 - 12x + 4 = 0$  are

- A. Real and equal
- B. Real and distinct
- C. Complex
- D. None of these

18 Question Image

19 The principal value of  $\sin^{-1}[-\sqrt{3}/2]$  is

- A.  $5\pi/3$
- B.  $-2\pi/3$
- C.   $\pi/3$
- D.  $\pi/3$

20  $i^9 =$

- A.  $i^2$
- B. -1
- C. 1
- D. i