

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$x^3 + 2x^2 - 3x + 5$ is _____	A. An equation B. A polynomial C. Proper rational fractions D. Improper rational fractions
2	Question Image	
3	Question Image	
4	The slope of the normal at the point $(at^2, 2at)$ of the parabola $y^2 = 4ax$ is	A. $1/t$ B. $t$ C. $-t$ D. $-1/t$
5	For all points $(x,y)$ in fourth quadrant	A. $x \geq 0, y \leq 0$ B. $x \geq 0, y \geq 0$ C. $x \leq 0, y \leq 0$ D. $x \leq 0, y \geq 0$
6	The points $(x, y)$ which satisfy a linear inequality in two variables $x$ and $y$ from its	A. domain B. range C. solution D. none of these
7	Range of $\sec \theta$ is	A. $Z - \{x \mid -1 \leq x \leq 1\}$ B. $W - \{x \mid -1 \leq x \leq 1\}$ C. $R - \{x \mid -1 \leq x \leq 1\}$ D. $R$
8	General solution of $1 + \cos x = 0$ is	
9	Question Image	
10	Question Image	A. Free vector B. Null vector C. Unit vector D. None of these
11	If $w + w^2$ is a root of $(x+1)(x+2)(x+3)(x+4) = k$ , then	A. $k=0$ B. $k=1$ C. $k=w$ D. $k=w^2$
12	The sum of the cubes of three consecutive natural number is divisible by	A. 9 B. 6 C. 5 D. 10
13	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. $2n$
14	An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is	A. $3/10$ B. $5/10$ C. $7/10$ D. $9/10$
15	If either $A = 0$ or $B = 0$ , then $Ax^2 + By^2 + 2Gx + 2Fy + c = 0$ represents a	A. Circle B. Hyperbola C. Ellipse D. Parabola
16	Question Image	
17	How many arrangements of the letters of the word ADDING can be made	
18	Question Image	
19	Question Image	A. $6x - 2 + c$ B. $x^3 - x^2 + x + c$ C. $6x - x^2 + c$

$$D. 6x^3 - x^2 + c$$

20 The third term of a G.P. is 4, The product of first five terms is

- A. 43
- B. 45
- C. 46
- D. None of these