

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$w^{11} = \underline{\hspace{2cm}}$	A. 0 B. 1 C. w D. $w^{<sup>2</sup>}$
2	Domain of cosec x is $\underline{\hspace{2cm}}$	
3	The graph of the linear equation of the form $ax + by = c$ is a line which divided the plane into:	A. Two similar regions B. Two disjoint regions C. Four equal parts D. One region
4	Question Image	
5	Which of the following sets has closure property w.r.t. addition	A. { 0 } B. { 1 } C. { 0, -1 } D. { 1, -1 }
6	If one end of the diameter of the circle $x^2 + y^2 - 5x + 3y - 22 = 0$ is (3,4) the other end is:	A. (2,7) B. (-2,-7) C. (-2,7) D. (2,-7)
7	An integral of $1/x$ dx is:	A. $1/x^{<sup>2</sup>}$ B. $1/-x^{<sup>2</sup>}$ C. $1/\ln x$ D. $\ln x$
8	The matrix $A = [a_{ij}]_{1 \times n}$ is a	A. Vector B. Rectangular matrix C. Column vector D. Square matrix
9	Three consecutive terms of a progression are 30, 24, 20. The next terms of the progression is	
10	If $\alpha, \beta$ are the roots of $ax^2 + bx + c = 0$ and $\alpha + h, \beta + h$ are the roots of $px^2 + qx + r = 0$ , then $h =$	
11	Question Image	A. l3 B. r l3 C. r D. none
12	If $f(x) = x^2 - x$ then $f(1)$ is	A. 0 B. 1 C. 2 D. 3
13	$3/2$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
14	The distance between the points (2,3) and (3,2) is	A. 5 C. 2 D. 10
15	Question Image	
16	$\cos 3a = \underline{\hspace{2cm}};$	A. $3\sin a - 4\sin^3 a$ B. $4\sin a - 3\sin^3 a$ C. $3\cos^3 a - 4\cos a$ D. $4\cos^3 a - 3\cos a$
17	General solution of $1 + \cos x = 0$ is	
18	The range of the function $f : x \rightarrow y$ is defined by	A. $\{x   y = f(x) \forall x \in X \wedge y \in Y\}$ B. $\{(x,y)   y = f(x) \forall x \in X\}$ C. $\{y   y = f(x) \forall x \in X \wedge y \in Y\}$ D. Y
		A. 3

19 The maximum value of the quadratic function  $f(x) = 2x^2 - 4x + 7$ , is

- B. 5
- C. -3
- D. -5

20 In  $\mathbb{R}$ , the multiplicative identity is

- A. 0
- B. 1
- C. -1
- D. None