

## Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$(7, 9) + (3, -5) =$	A. (4, 4) B. (10, 4) C. (9, -5) D. (7, 3)
2	If for the matrix A, $A^5 = I$ , then $A^{-1} =$	A. $A^{2/3}$ B. $A^{3/2}$ C. A D. None of above
3	If eccentricity of ellipse becomes zero then it takes the form of	A. A parabola B. A circle C. A straight line D. None of these
4	The complement of set A relative to universal set U is the set	A. $\{x / x \in A \wedge x \in U\}$ B. $\{x / x \notin A \wedge x \in U\}$ C. $\{x / x \in A \text{ and } x \notin U\}$ D. A-U
5	The vector $k = [0,0,1]$ is called unit vector along:	A. x -axis B. y - axis C. z - axis D. None of these
6	$(x^3 - 1/x)^{12}$	A. 295 B. 495 C. 395 D. 722
7	In a school there are 150 students Out of these 80 students enrolled for mathematics class.50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60
8	Question Image	
9	If $0 \in R$ , then the additive inverse of a is	A. 1/9 B. $1/9$ C. a D. -a
10	The distance between the points (2, 2) and (3, 3) is	A. 10 C. 5 D. 2
11	Question Image	
12	Question Image	A. $30^\circ$ B. $45^\circ$ C. $60^\circ$ D. $90^\circ$
13	Any point, where f is neither increasing nor decreasing and $f(x) = 0$ at that point, is called a	A. Minimum B. Maximum C. Stationary point D. Constant point
14	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
15	Question Image	A. additive property B. multiplicative property C. additive identity D. multiplicative identity
16	Question Image	
17	$\csc(-\pi/2) =$ _____;	A. 0 B. 1 C. -1

D. Undefined

18 A prime number can be a factor of a square only if it occurs in the square at least

- A. Once
- B. Thirce
- C. Twice
- D. None of these

19 Question Image

20 Question Image

- A.  $2^{n-1}$
- B.  $1 - 2^n$
- C.  $n + 2^{n-1}$
- D.  $2^n - 1$