

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The value of x which is unchanged by the mapping in the function defined by $f : x \mapsto x^2 + 5x - 5$ for $x > 0$ is	A. 1 B. 5 C. -5 D. -1
2	The set $\{1, 2, 3, 4, \dots\}$ is called	A. Set of Natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
3	$\sin 5\theta + \sin 3\theta = \dots$;	A. $2\sin 4\theta \cos \theta$ B. $2\cos 4\theta \sin \theta$ C. $2\cos 4\theta \cos \theta$ D. $-2\sin 4\theta \sin \theta$
4	The negation of given number is a	A. Binary operation B. Unary operation C. Relation D. None of these
5	The function $\phi(x)$ is an anti derivative of function $f(x), x \in D$ if	A. $\phi'(x) = f(x)dx$ B. $\phi(x) = f(x)dx$ C. $\phi'(x) = f(x)$ D. $\phi(x) = f'(x)dx$
6	If $A = [a_{ij}]$ is $(m \times n)$ matrix then transpose of A is of the order	A. $m \times m$ B. $m \times n$ C. $n \times n$ D. $n \times m$
7	Which of the following is a factor of $x^3 - 3x^2 + 2x - 6$	A. $x + 2$ B. $x + 3$ C. $x - 3$ D. $x - 4$
8	$\int f(x)$ is known as:	A. Definite itegral B. Indefinite integral C. Fixed integral D. Multiple integral
9	There may be _____ feasible solution in the feasible region	A. Infinite B. Finite C. Defined D. None of above
10	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$: this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity
11	Question Image	
12	Question Image	
13	If the line $2x - y + k = 0$ is a diameter of the circle $x^2 + y^2 + 6x - 6y + 5 = 0$ then k is equal to	A. 12 B. 9 C. 6 D. 3
14	$a_n - a_{n-1}$ will be common difference in an A.P if	A. $n = 1 \forall n \in \mathbb{N}$ B. $n \geq 1 \wedge n \in \mathbb{N}$ C. $n \in \mathbb{Z}$ D. None of the above

A. $\frac{1}{n}$
B. $\frac{1}{n^2}$
C. $\frac{1}{n^3}$
D. $\frac{1}{n^4}$

style= background-color: rgb(255, 255, 248); color: rgb(34, 34, 34); font-family: "Times New Roman"; font-size: 18px;">I quadrants</div>
 B. II andI andI quadrants
 C. II andI andI quadrants
 D. none of these

15 Question Image

16 If p and q are two statements then their biconditional 'p if q' is denoted by

17 In $(x + iy)$, y is called as

- A. Imaginary part
- B. Complex number
- C. Real part
- D. None of above

18 Question Image

19 Question Image

20 Question Image

D. none of these