

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	<p>A. A B. B C. U D. None of these</p>
2	A stationary point x is a relative extrema of $y = f(x)$ is	<p>A. $f''(x) > 0$ B. $f''(x) < 0$ C. $f''(x) \neq 0$ D. $f''(x) = 0$</p>
3	The distance s of a particle in time t is given by $s = t^3 - 6t^2 - 4t - 8$. Its acceleration vanishes at $t =$	<p>A. 1 B. 2 C. 3 D. 4</p>
4	The extraction of cube root of a given number is a	<p>A. Unary Operation B. Binary Operation C. Relation D. None of these</p>
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	<p>A. $c = 0$ B. $c = -1$ C. $c = -2$ D. $c = 1$</p>
6	The liner equation $ax + by = c$ is called _____ of the inequality $ax + by > c$.	<p>A. Associated equation B. Non-associated equation C. disjoint equation D. Feasible equation</p>
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	Projection of vector u along v is	<p>A. $v \cos\theta$ B. $u \cos\theta$ C. $v \sin\theta$ D. $u \sin\theta$</p>
9	If a, b, c are in A.P., then $3^a, 3^b, 3^c$ are in	<p>A. A.P. B. G.P. C. H.P. D. None of these</p>
10	For every positive integers n $1+5+9+\dots+(4n-3)$ is	<p>A. $n(2n-1)$ B. $(2n-1)$ C. $n-1$ D. n</p>
11	The set $(Z, +)$ forms a group	<p>A. Forms a group w.r.t. addition B. Non commutative group w.r.t. multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group</p>
12	If $\text{Proj}_v u = \text{Proj}_u v$, then	<p>A. u and v are parallel B. $u = v$ C. u and v are perpendicular D. One of u or v</p>
13	The parametric equations of a circle are	<p>A. $C \cos^2 \lambda + B \sin^2 \lambda$ B. $A \cos^2 \lambda + B \sin^2 \lambda$ C. $A \sin^2 \lambda + B \cos^2 \lambda$ D. $A \sin^2 \lambda + B \cos^2 \lambda$</p>
14	The line $Ax + By + C = 0$ will touch the circle $x^2 + y^2 = \lambda$ when	<p>A. $C^2 = \lambda(A^2 + B^2)$ B. $A^2 = \lambda(B^2 + C^2)$ C. $B^2 = \lambda(A^2 + C^2)$ D. $A^2 + B^2 = \lambda C^2$</p>

C. $B^2 = C^2$
D. None of these

15 Question Image

16 Question Image

- A. Commutative law of multiplication
- B. Closure law of multiplication
- C. Associative law of multiplication
- D. Multiplication identity

17 Question Image

- A. 20
- B. 10
- C. 0
- D. None of these

18 Question Image

- A. quadratic function
- B. constant function
- C. trigonometric function
- D. linear function

19 $\cot 45^\circ =$ _____

20 Find the next two terms of 7, 9, 12, 16,...

- A. 18, 20
- B. 19, 22
- C. 20, 25
- D. 21, 27