

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Derivative of strictly increasing function is always	A. Zero B. Positive C. Negative D. Both (A) and (B)
2	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
3	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. ∞ Infinite series D. geometric sequence
4	Question Image	A. $2x$ B. $3x^2$ C. 1 D. 0
5	Question Image	A. 1 B. 2 C. 0 D. 4
6	Question Image	
7	Question Image	A. parallel vectors B. perpendicular vectors C. concurrent vectors D. collinear vectors
8	Question Image	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
9	Question Image	A. 3×1 B. 1×3 C. 3×3 D. 1×1
10	Name the property used in $100 + 0 = 100$	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity
11	Which is an explicit function	A. $y = x^2 + 2x - 1$ B. $x^2 + xy + y^2 = 2$ C. $x^2 + y^2 = 2$ D. All are
12	The equation of the plane which bisects the line joining (2, 3, 4) and (6, 7, 8) is	A. $x + y + z - 15 = 0$ B. $x - y + z - 15 = 0$ C. $x - y - z - 15 = 0$ D. $x + y + z + 15 = 0$
13	A point where two of its boundary lines intersect is called	A. Corner point B. Feasible point C. Vertex D. Feasible solution
14	The line $y = mx + 1$ is tangent to the parabola $y^2 = 4x$ if	A. $m=1$ B. $m=2$ C. $m=3$ D. $m=4$
15	A conditional "if p then q" is denoted by	
16	Question Image	A. 0 B. 1 C. -2 D. -1

D. 10

17

Question Image

- A. One-one but not onto
- B. One-one and onto
- C. Onto but not one-one
- D. Neither one-one nor onto

18

If the angle between two vectors with magnitude 2 and 15 is 30° then their scalar product is

- B. 15
- C. 30

19

What is the conjugate of $-6 - i$

- A. $-6 + i$
- B. $6 + i$
- C. $-6 - i$
- D. $6 - i$

20

Question Image

- A. $2s^{>2<}$
- B. $2s^{>3<}$
- C. $s^{>3<}$
- D. $3s^{>3<}$