

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The multiplicative inverse of -1 in the set $\{1, -1\}$ is	A. 1 B. -1 C. ± 1 D. 0 E. Does not exist
2	Question Image	
3	What is the probability of being born on Wednesday?	A. $\frac{1}{7}$ B. $\frac{1}{2}$ C. $\frac{1}{3}$ D. $\frac{1}{8}$
4	A square matrix A for which $A^t = -A$ is called a	A. Column matrix B. Symmetric matrix C. Skew-symmetric matrix D. Row matrix
5	The value of n, when ${}^nP_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
6	The third term of a G.P. is 4, The product of first five terms is	A. 43 B. 45 C. 46 D. None of these
7	If $f(x) = x^2$ then $f(0)$ is	A. 0 B. 1 C. 2 D. none of these
8	The minimum value of the quadratic function $f(x) = 5x^2 - 11x$ is	A. -11 B. 6 C. -7 D. 7
9	Question Image	A. $A^{\sup>-/\sup>}$ B. $A^{\sup>t/\sup>}$ C. -A D. A
10	Question Image	A. 0 C. 1
11	Question Image	A. 1 B. 2 C. 3 D. 4
12	If $y = \sin(ax + b)$, then fourth derivative of y with respect to x =	A. $a^{\sup>4/\sup>} \cos(ax + b)$ B. $a^{\sup>4/\sup>} \sin(ax + b)$ C. $-a^{\sup>4/\sup>} \sin(ax + b)$ D. $a^{\sup>4/\sup>} \tan(ax + b)$
13	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620
14	Question Image	A. The law of sines B. The law of tangents C. The pythagorus theorem D. None of these
15	The roots of $ax^2 + bx + c = 0$ are always unequal if	A. $b^2 - 4ac = 0$ B. $b^2 - 4ac \neq 0$ C. $b^2 - 4ac > 0$ D. $b^2 - 4ac \geq 0$
16	Question Image	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property of addition

D. Associative property w.r.t. to addition

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Question Image

- A. 0
- B. 1
- C. $\frac{1}{2}$

18

Question Image

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If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?

- A. $36 + (-32)i$
- B. $-36 + 32i$
- C. $6 + (-11)i$
- D. $0 + (-12)i$

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The central angle of an arc of a circle whose length is equal to the radius of the circle is called the

- A. degree
- B. radian
- C. minute
- D. second