

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	The longer side of a parallelogram is 10 cm and the shorter is 6 cm. If the longer diagonal makes an angles 30° with the longer side, the length of the longer diagonal is	
2	Number of terms in the expansion of $(a+x)^n$ is	A. $n - 1$ B. $n + 1$ C. $n + 2$ D. $n + 3$
3	There are two middle terms in the expansion of $(a+x)^n$ if n is	A. Even +ve integer B. +ve integer C. Odd +ve integer D. All
4	The interval in which $f(x)=x^3-6x^2+9x$ is increasing	A. $1 \leq x \leq 3$ B. $x \leq 1$ and $x \geq 3$ C. $x \geq 1$ and $x \leq 3$ D. $-\infty \leq x \leq \infty$
5	A vector with magnitude one is called	A. constant vector B. unit vector C. zero vector D. null vector
6	Period of $\tan 4x$ is _____	
7	<div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> Question Image	A. A, B, C are coincident B. A, B, C are collinear C. Both A and B D. None of these
8	The 5th and 13th terms of an A.P are 5 and -3 respectively The first term of the A.P is	A. 1 B. -15 C. 9 D. 2
9	The number of words that can be formed out of the letters of the word ASSASSINATION is	
10	The first three terms in the expansion of $(1 - x)^{-1}$ are	A. $1 + x + x^2$ B. $1 - x - x^2$ C. $-1 - x + x^2$ D. $1 - x + x^2$
11	The sum of first n even number is	A. n^2 B. $n(n+1)$ C. $n+1$ D. $n+2$
12	If p and q are two statements then their biconditional 'p if q' is denoted by	
13	If five triangles are constructed having sides of the lengths indicated below, the triangle that will NOT be a right triangle is	A. 8, 15, 17 B. 3, 4, 5 C. 12, 15, 18 D. 5, 12, 13
14	$2x = 3$ is a conditional equation it is true for	A. 2 B. 3 C. $\frac{3}{2}$ D. $\frac{2}{3}$
15	Φ set is the _____ of all sets	A. Subset B. Union C. Universal D. Intersection
16	<div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> Question Image	A. I quadrant B. II quadrant C. III quadrant D. IV quadrant
17	For all points (x,y) in second quadrant	A. $x > 0, y < 0$ B. $x > 0, y > 0$ C. $x < 0, y < 0$ D. $x < 0, y > 0$

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Question Image

- A. Does not exist because f is unbounded
- B. Is not attained even though f is bounded
- C. Is equal to 1
- D. Is equal to -1

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120° degrees are equal to how many radians?

20

Question Image

- A. Rule of quotient of fraction
- B. Golden rule of fraction
- C. Rule for product of fraction
- D. Principle for equality of fraction