

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Domain of $\cos x$ is _____	
2	$3j \cdot k \times i$	A. 0 B. 1 <b style="color: green;">C. 3 D. 9
3	$\tan^{-1}x > \cot^{-1}x$ holds for	<b style="color: green;">A. $x > 1$ B. $x < 1$ C. $x = 1$ D. All values of x
4	The circle $(x - 2)^2 + (y + 3)^2 = 4$ is not concentric with the circle	A. $(x - 2)^2 + (y + 3)^2 = 9$ <b style="color: green;">B. $(x + 2)^2 + (y - 3)^2 = 4$ C. $(x + 2)^2 + (y - 3)^2 = 8$ D. $(x - 2)^2 + (y + 3)^2 = 5$
5	$(A \cap B)^c =$ -----	A. $A^c \cup B^c$ <b style="color: green;">B. $A^c \cup B$ C. $A^c \cap B$ D. None of these
6	Which term of the A.P 5,8,11,24.....is 320	A. 104th <b style="color: green;">B. 106th C. 105th D. 64th
7	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
8	The probability that a person A will be alive 15 years hence is $\frac{5}{7}$ and the probability that another person B will be alive 15 years hence is $\frac{7}{9}$. Find the probability that both will be alive 15 years hence	A. $\frac{4}{63}$ <b style="color: green;">B. $\frac{5}{9}$ C. $\frac{45}{49}$ D. None of these
9	The proposition $S(n)$ is true $\forall n \in \mathbb{N}$, $S(k+1)$ true when _____ is true	A. $S(1)$ <b style="color: green;">B. Both a & c C. $S(k)$ D. None
10	$(1,0)$ is in the solution of the inequality	A. $3x + 2y > 8$ <b style="color: green;">B. $2x - 3y < 4$ C. $2x + 3y > 3$ D. $x - 2y < -5$
11	The area of a sector with central angle of 0.5 radians in a circular region whose radius is 2m is	
12	Question Image <input style="width: 100%; height: 15px;" type="text"/>	<b style="color: green;">A. 30° B. 45° C. 60° D. 90°
13	$i^3 =$	A. -1 B. i <b style="color: green;">C. -i D. 1
14	A tower subtends an angle α at a point on the same level as the root of the tower and at a second point, b meters above the first, the angle of depression of the foot of the tower is β . The height of the tower is	A. $b \cot \alpha \tan \beta$ B. $b \tan \alpha \tan \beta$

248);" ><i>β</i>
C. b tan<i style="text-align: center;">α</i><i>β</i>
D. None of these

15 The sum of complex number (a,b) and (c,d) is

16 Question Image

17 The factorial of a positive integers is a (an)

- A. Rational number
- B. Positive integer
- C. Real number
- D. None

18 $f(x) = ax + b$ will be a constant function if

- A. $a = 1, b = 1$
- B. $a = 1, b = 0$

19 _____ invented a symbolic way to write the statement "y is a function of x" as $y = f(x)$

- A. Leibniz
- B. Newton
- C. Euler
- D. None of these

20 Question Image

- A. Addition
- B. Multiplication
- C. Division
- D. Both addition and multiplication