

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	$i^9 =$	A. $i^{²}$ B. -1 C. 1 D. i
2	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. $\frac{5}{9}$ C. $\frac{45}{49}$ D. None of these
3	Question Image	
4	The period of the function $f(x) = \sin^4 x + \cos^4 x$ is	A. π B. $\frac{\pi}{2}$ C. 2π D. None of these
5	Question Image	
6	Question Image	
7	Question Image	A. a^x B. $a^x \ln a$
8	Which symbolic notation represent unary operation ?	A. - B. \vee C. \wedge D. \Leftrightarrow
9	Question Image	A. 4 B. 3 C. 2 D. 1
10	For all positive integral value of n, $3^n < n!$, when	A. $n > 6$ B. $n < 6$ C. $n > 11$ D. $n > 11$
11	The coordinates of the point that divides the join of A(-6,3) and B(5, -2) in the ratio 2:3 externally are	
12	The coefficient of x^{18} in $(ax^4 - bx)^9$ after expansion is	A. $84a^3b^6$ B. $22a^3b^6$ C. $27a^4b^5$ D. $28a^3b^6$
13	The slope of x-axis is	A. 0 B. undefined C. 1
14	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule of fractions D. Rule for quotient of fractions
15	The range of $y = x^2 + 1$ is the set of non-negative real numbers except	A. $0 \leq y < 1$ B. $0 < y < 1$ C. $0 \leq y \leq 1$ D. $0 < y \leq 1$

16	The domain of the function $x/x^2 - 4$ is given by	A. \mathbb{R} B. $\mathbb{R} + 2$ C. $[\mathbb{R} - (<u>+</u>2)]$ D. $\mathbb{R} - 4$
17	The distance of the point (a, b) from x-axis is	A. a B. b C. a + b
18	Three consecutive terms of a progression are 30, 24, 20. The next terms of the progression is	
19	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
20	An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is	A. $3 / 10$ B. $5 / 10$ C. $7 / 10$ D. $9 / 10$