

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If a_1 , r and a_n are the first term, common ratio and the n th term respectively of a G. P. then $a_n =$	A. $a_1 r^{n-1}$ B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$ D. $a_1 r$
2	The equations of the line thro' the point (2, 3, -5) and equally inclined to the axis are	
3	The n numbers $A_1, A_2, A_3, \dots, A_n$ are called an arithmetic means between a and b if $a, A_1, A_2, A_3, \dots, A_n, b$ is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence
4	The sum even binomial coefficient of $(3+2x)^5$ is _____ term	A. 16 B. 30 C. 8 D. 32
5	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. $9/10$
6	$120^\circ =$ _____	
7	Question Image	A. N B. r C. $2r$ D. π
8	The standard parabolic form of the equation $f(x) = x^2 + 4x + 1$ is	A. $x(x+4)+1$ B. $(x+2)^2 - 3$ C. $(x+4)^2 + 9$ D. $x(x-2)^2 + 1$
9	Apollonius was a:	A. Rocket B. Muslims scientist C. Greek mathematicians D. Method of finding conics
10	$2\cos^2 \frac{a}{2} =$ _____;	A. $1+\sin a$ B. $1-\sin a$ C. $1+\cos a$ D. $1-\cos a$
11	The equation $x^2 + y^2 = 0$ represents	A. A circle B. A degenerate circle C. An empty set D. A st. line
12	If p and q are two statements then their biconditional 'p if q' is denoted by	
13	Question Image	
14	The set $\{-1, 1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
15	A prime number can be a factor of a square only if it occurs in the square at least	A. Once B. Thirce C. Twice D. None of these
16	The identity element with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
17	If a_1 and r are the first term and the common ratio respectively then $(n+1)$ th term of the G.P. is	A. 0 B. $a_1 r^{n-1}$ C. $a_1 r^{n+1}$

18 A chimney is such that on walking towards it 50 m in a horizontal line through its base the angular elevation of its top changes from 30° to 45° . The height of the chimney is

19 The integral of $3x^5 dx$ is:

- A. $15x^4$
B. $x^6/2$
C. $1/6x^5$
D. $x^5/\ln 3$

20 Question Image

- A. $-3 - 2i$
B. $3 + 2i$
C. $1 + 2i$
D. $1 - 2i$