

Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	Question Image	
2	A sequence is a function whose domain is	A. N B. Subset of N C. R D. None of these
3	For $f(x) = x^2 + px + 1$, if $f(3) = 3$ then $P =$	A. $3/7$ B. $-2/5$ C. $-7/5$ D. $-7/3$
4	$0! =$ _____	A. 0 B. 1 C. 2 D. Not defined
5	If $x^3 + ax^2 - a^2x - a^3$ is divided by $x + a$, then the remainder is	A. 0 B. a^3 C. $2a^3$ D. $-2a^3$
6	Question Image	
7	Question Image	A. 4 B. 6 C. 8 D. 10
8	Question Image	A. $A = x, B = 1$ B. $A = 0, B = 2$ C. $A = -1, B = 1$ D. $A = x-1, B = x+1$
9	In R the right cancellation property w.r.t. addition is	
10	Question Image	A. 7 B. 5 C. 6 D. None of these
11	Question Image	A. $1 + \tan^2 x + c$ B. $\tan x + c$ C. $-\tan x + c$ D. $\cot x + c$
12	The first three terms in the expansion of $(1 + x)^3$ are	A. $1 + 3x + 6x^2$ B. $1 - 3x + 6x^2$ C. $-3 - 3x - 6x^2$ D. $1 - 3x - 6x^2$
13	A number A is called the arithmetic mean between a and b if a, A, b is _____	A. Arithmetic sequence B. Geometric sequence C. Harmonic sequence D. Arithmetic sequence
14	$\sin(\pi + \theta) =$ _____;	A. $\sin \theta$ B. $\cos \theta$ C. $-\sin \theta$ D. $-\cos \theta$
15	Question Image	
16	π is the ratio of	A. Area of a circle to its diameter B. Area of a circle to its radius C. Circumference of a circle to its diameter D. Circumference of circle to its radius
17	An unbiased die is thrown. Then the probability of getting a prime is	A. $1/2$ B. $2/3$ C. $3/4$ D. None of these

18	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620
19	The positive value of k for which the equation $x^2 + kx + 64 = 0$ has one of the roots 0	A. 4 B. 64 C. 8 D. All values of k
20	In the expansion of $(a + x)^n$ the sum of exponents of a and x in each term of the expansion is	A. $n + 1$ B. $n - 1$ C. n D. $2n$