ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	If Sn is a definite number as n → ∞,then the geometric series is	A. Convergent B. Divergent C. Oscillatroy D. None of these
2	The sum of infinite numbers of terms of an arithmetic series is	A. Finite B. Infinite C. May or may not finite D. None of these
3	The sum of indicated terms of a sequence is called	A. Arithmetic series B. Series C. Harmonic series D. None of these
4	an - an-1 will be common difference in an A.P if	A. n = 1∀n∈ N B. n>1∧n∈N C. n∈Z D. None of the above
5	For three consecutive terms in A.P middle term is called	A. A.M B. nth term C. Central term D. None of these
6	If A is such that a,A,B are in A.P then A is called	A. A.M B. Common ratio C. Common difference D. None of these
7	In an A.P,a +(n-a)d is	A. 1st term B. General term C. Last term D. None of these
8	an -an-1, ∀n∈N∧n>1 in an A.P is called	A. Common difference B. nth term C. Common ratio D. None of these
9	If all members of a sequence are real numbers then it is called	A. A.P B. Real Sequence C. G.P D. None of these
10	If x,y are two -ve distinct numbers then	A. A>G>H B. A<G<H C. A=G=H D. None of these
11	If x,y are two positive distinct numbers then	A. A>G>H B. A<G<H C. A=G=H D. None of these
12	A,G,H are in	A. A.P B. G.P C. H.P D. None of these
13	A sequence whose reciprocal is an A.P is called	A. Oscillator B. H.P C. G.P D. None of these
14	A Series which does not coverage to a Unique sum is called	A. Harmonic Series B. Oscillatroy Series C. Arithmetic Series D. None of these
15	A Geometric Series is divergent only if	A. |r|>1 B. |r|≥1 C. |r|=1 D. None of these

16	The three consecutive numbers a,√ab,b are in	A. G.P B. H.P C. G.M D. None of these
17	If G is a G.M between a and b then a,G,b are in	A. A.P B. H.P C. G.P D. None of these
18	The formula an = arn-1represents	A. nth term of G.P B. Sum of the first n terms C. G.M between a and b D. None of these
19	The formula an = a +(n-1)d for an A.P is called	A. nth term of an A.P B. Sum of first n terms C. A,M between a and b D. None of the above
20	An infinite sequence has no	A. nth term B. Last term C. Sum D. None of these
21	An indicated sum of terms of a sequence is represented by	A. Sn B. an C. S(n) D. {Sn}
22	Which one represents a sequence	A. an B. Sn C. a(n) D. {an}
23	The domain of an infinite sequence is a	A. Set of natural numbers B. R C. Subset of N D. None of the above
24	The domain of a finite sequence is a	A. Set of natural numbers B. R C. Subset of N D. Proper subset of N
25	A sequence is a function whose domain is	A. N B. Subset of N C. R D. None of these
26	The roots of px2 - (p-q)x-q=0 are	A. equal B. Irrational C. Rational D. Imaginary
27	The roots of (b-c)x2+(c-a) x+a-b=0 are equal if	A. 2b = a+c B. 2a = b+c C. 2c = a+b D. a + b + c =0
28	The roots of ax2+bx+c=0 are	A. Rational ⇔ b2 -4 ac ≥ 0 B. Irrational ⇔ b2-4 ac > 0 C. Real ⇔ b2-4 ac ≠ 0 D. Rational⇔ b2-4 ac = 0
29	If a,β are the roots of ax2+bx+c=0,the equation whose roots are doubled is	A. ay2 +2by+c=0 B. ay2+2by+4c=0 C. ay2+2by+c=0 D. ay2+by+4c=0
30	If w+w2 is a root of (x+1)(x+2)(x+3)(x+4) = k, then	A. k=0 B. k=1 C. k=w D. k=w2