ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	n(n-1)(2n-1), for all natural numbers n, is divisible by	A. 12 B. 6 C. 2 D. 18
2	For each natural number n, n (n+1) is	A. an even B. an odd C. multiple of 3 D. Irrational
3	There is no integer n for which 3^n is	A. Odd B. even C. Natural D. Prime
4	n!/(n-1)!=	A. n B. n! C. (n-1)! D. 0!
5	Two coins are tossed twice each. The probability that the head appears on the first toss and the same forces appear in the two tosses is	A. 1/4 B. 1/2 C. 1/3 D. 1/7
6	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. 1/5 B. 1/36 C. 1/7 D. 1/63
7	A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is	A. 1/2 B. 2/3 C. 1/3 D. 2/5
8	A die is rolled. What is the probability that the dots on the top are greater than 4?	A. 1/4 B. 1/2 C. 1/3 D. 1/33
9	A class contains nine boys and three girls, in how many ways can the teacher choose a committee of four?	A. 60 B. 460 C. 495 D. 272
10	What is the probability of being born on Wednesday?	A. 1/7 B. 1/2 C. 1/3 D. 1/8
11	There are 16 point in a plane, in which 6 are collinear. how many lines can be drawn by joining these points?	A. 10 B. 66 C. 71 D. 106
12	A series consisting of an unlimited number of terms is termed as an	A. Finite sequence B. Infinite sequence C. ^{Infinite series} D. geometric sequence
13	The sum of an indicated number of terms in a sequence is called	A. sequence B. progression C. Series D. Mean
14	If 5,7 and 9 are A.Ms between a and b, then a and b is equal to	A. 2 and 12 B. 1 and 10 C. 3 and 11 D. -7 and 2
15	A number A is said to be the A.M between the two numbers a and b if a, A, b are in	A. A.M B. A.P C. G.P D. G.M

16	if a_1 =3, d=7 and a_n =59 , then the number of terms in A.P is	A. 7 B. 9 C. 11 D. 13
17	If 6th term of a series in A.P, is -2 and 8th term is -8, the first term of the serie is	A. 13 B. -13 C. 18 D. -10
18	If a,b,c are in arithmetic progression, then 1/a,1/b.1/c are in	A. A.M B. G.M C. H.M D. G.P
19	The 7th term of the A.P 7,11,15,is	A. 24 B. 31 C. 26 D. 23
20	The nth term of an A.P., is 12-4n. Its common difference is	A. 8 B. 4 C. 4 D. 16
21	How many term are there in the A.P, in which a_1 = 11 , a_n =68, d=3	A. 30 B. 27 C. 20 D. 21
22	if a_9 =19,a9=31 are the 6th and 9th term of an A.P. and d=4 is the common difference, then 18th term of the sequence is	A. 65 B. 67 C. 71 D. 75
23	The 26th term of the A.P -2,-4,10,.....is	A. 136 B. -136 C. 148 D. -148
24	The 31 term of the A.P 5,2,-1.....is	A. -82 B. 82 C. 85 D. -85
25	The sum of first twenty odd integers in A.P is	A. 400 B. 397 C. 404 D. 408
26	The seventh term of an A.P whose first term is P and common difference is q. is	A. P-6q B. P+6q C. P-4q D. P-nq
27	The fifth term of an A.P. Whose first term is 5 and common difference is 3,is	A. 20 B. 17 C. 25 D. 30
28	The difference of two consecutive terms of an A.P is called the	A. Common difference B. Common ratio C. Geometric series D. Geometric mean
29	The sixth term of the sequence 1,3,12,60....is	A. 1500 B. 72 C. 2160 D. 2520
30	What is the 26th term of the sequence, if its general term is $a_n = (-1)^{n+1}$	A. 2 B. 26 C. 27 D. 1