ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	If origin is the mid point of (a, -3) and (-5, b) then	A. a = -5 , b = -3 B. a = 5 , b =3 C. a = -5 , b = 3 D. a = 5 , b = -3
2	The middle term in the expansion of $(a+x)^{12}$is	A. 7th B. 8th C. 9th D. 6th
3	The sum of the coefficient in the expansion of $(a + x)^5$is	A. 32 B. 16 C. 8 D. 5
4	The sum of the odd coefficients in the expansion of $(a + x)^4$is	A. 14 B. 12 C. 8 D. 4
5	If origin is the mid point of (a,3) and (5,b) then	A. a = -5 , b = -3 B. a = 5 , b =3 C. a = -5 , b = 3 D. a = 5 , b = -3
6	The sum of even coefficient in the binomial expansion is	A. 2ⁿ⁺¹ B. 2ⁿ C. 2ⁿ⁻¹ D. 2n
7	If n is odd then the middle terms in the expansion of $(a + x)^n$are	
8	Question Image	A. a B. 2a C. 3a D. 4a
9	Question Image	A. 1 B. 2 C. -1 D. 0
10	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
11	The mid point of the line segment joining the points (a,b) and (b,a) is	
12	The number of terms in the expansion of $(a + b)^9$is	A. 10 B. 11 C. 9 D. 12
13	If the exponent in the binomial expansion is 6, then the middle term is	A. 2nd B. 3rd C. 4th D. 5th
14	The mid point of the line segment joining the points (3,-1) and (-3,1) is	A. (3,-1) B. (0,0) C. (2,2) D. (4,4)
15	The first three terms in the expansion of $(1 - x)^{-3}$are	A. 1 + 3x + 6x² B. 1 - 3x + 6x² C. -3 - 3x - 6x² D. 1 - 3x - 6x²
16	The mid point of the line segment joining the points (4,0) and (0,4) is	A. (4,4) B. (2,2) C. (-4,-4) D. (-2,-2)

17	The first three terms in the expansion of $(1 - x)^{-2}$ are	A. 1 - 2x + 3x² B. 1 - 2x - 3x² C. 1 + 2x + 3x² D. -2 - 2x +3x²
18	The mid point of the line segment joining the points A(-8,3) and B(2,-1) is	A. (-3,1) B. (-6,2) C. (5,2) D. (-5,2)
19	The mid point of the line segment joining the points A(3,1) and B(-2,-4) is	A. (1, -3)
20	The first three terms in the expansion of $(1 - x)^{-1}$ are	A. 1 + x + x² B. 1 - x - x² C. -1 -x +x² D. 1 - x + x²
21	The first three terms in the expansion of $(1 + x)^{3}$ are	A. 1 + 3x +6x² B. 1- 3x + 6x²\ C. -3 -3x -6x² D. 1- 3x -6x²
22	The first three terms in the expansion of $(1 + x)^{-2}$ are _____	A. 1 - 2x + 3x² B. 1 - 2x - 3x² C. 1 + 2x + 3x² D. -2 -2x + 3x²
23	The distance between the points A(-8,3) and B(2,-1) is	B. 116 D. none of these
24	The first three terms in the expansion of $(1 + x)^{-1}$ are	A. 1 + x + x² B. 1 - x - x² C. -1 -x + x² D. 1 - x + x²
25	The distance between the points A(3,1) and B(-2,-4) is	A. 5 C. 25 D. 10
26	The sum of coefficients in the binomial expansion equals to	A. 2 B. 2ⁿ⁺¹ C. 2ⁿ⁻¹ D. 2ⁿ
27	Question Image	A. Even B. Odd C. Prime D. None of these
28	The mid point of the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ is	
29	Question Image	A. 2 B. 7 C. 8 D. 12
30	The point R dividing externally the line joining the points $P(x_1, y_1)$ and $Q(x_2, y_2)$ in the ratio $k_1 : k_2$ has the coordinates	