

ECAT Pre Engineering Entry Test

Sr	Questions	Answers Choice
1	If $f(x) = \tan x$ then $f(0)$ is	A. 0 B. 1 C. 1/2
2	Question Image	A. 0 B. 1 C. 1/2
3	If $f(x) = \cos x$ then $f(0)$ is	A. 0 B. 1 C. 1/2
4	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(2)$ is	A. 7 B. -16 C. 16 D. -9
5	Question Image	A. -1 B. 1 C. 2 D. -2
6	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(0)$ is	A. 0 B. 1 C. -1 D. none of these
7	Question Image	A. 0 B. 3 C. 9 D. -3
8	Question Image	A. 2 B. -1 C. 8 D. not defined
9	Question Image	A. 0 B. -4 D. none of these
10	Question Image	A. 2 D. 0
11	Question Image	A. 2 B. 6
12	Question Image	A. 0 B. 1 C. 2 D. None of these
13	Which of the following is a factor of $x^3 - 3x^2 + 2x - 6$	A. $x + 2$ B. $x + 3$ C. $x - 3$ D. $x - 4$
14	Find a if 1 is a root of the equation $x^2 + ax + 2 = 0$	A. 3 B. -3 C. 2 D. 0
15	If $x - 2$ is a factor of $ax^2 - 12x + a = 2a$, then $a =$ _____	A. -5 B. 5 C. 0 D. 1
16	Question Image	A. 2 C. -2 D. none of these
17	If $x^2 - 7x + a$ has remainder 1 when divided by $x + 1$, then $a =$ _____	A. -7 B. 7 C. 0 D. None of these

18	If $f(x) = x^2 - x$ then $f(-2)$ is	A. 4 B. 6 C. 2 D. 0
19	If $f(x) = x^2 - x$ then $f(2)$ is	A. 4 B. 6 C. 2 D. 0
20	If $f(x) = x^2 - x$ then $f(1)$ is	A. 0 B. 1 C. 2 D. 3
21	If $f(x) = x^2 - x$ then $f(0)$ is	A. 0 B. 1 C. 2 D. 3
22	Two quadratic equation in which xy term is missing and the coefficients of x^2 and y^2 are equal, give a linear equation by _____	A. Addition B. Subtraction C. Multiplication D. Division
23	If $f(x) = -x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
24	If $f(x) = x^3$ then $f(-2)$ is	A. -2 B. -4 C. -8 D. 8
25	The polynomial $x - a$ is a factor of the polynomial $f(x)$ if and only if	A. $f(a)$ is positive B. $f(a)$ is negative C. $f(a) = 0$ D. None of these
26	If $f(x) = -x^2$ then $f(-2)$ is	A. -2 B. 2 C. -4 D. 4
27	The product of the four fourth roots of unity is	A. 0 B. 1 C. -1 D. None of these
28	If $f(x) = (-x)^2$ then $f(-2)$ is	A. 0 B. 2 C. -4 D. 4
29	If $f(x) = x^2$ then $f(2)$ is	A. -2 B. 2 C. 4 D. -4
30	If $f(x) = x^2$ then $f(-2)$ is	A. -2 B. 2 C. 4 D. -4