# ECAT Mathematics MCQ's Test For Full Book

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Question Image | A. sin h x<br>B. cos h x<br>C. sec h x<br>D. cosec h x |
| 2 | The function discontinuous at x = 0 is (1) tan x (II) cot x (III) sec x (iv)cosec x) | A. I & III<br>B. I & IV<br>C. II & IV<br>D. II & III |
| 3 | for n€ N, $3^{2n+7}$ is divisible by | A. 7<br>B. 8<br>C. 9<br>D. 10 |
| 4 | If $3x^4+ 4x^3+ x - 5$ is divided by x + 1, then the reminder is | A. 0<br>B. 7<br>C. -7<br>D. 5 |
| 5 | If n is any positive integer then $n! > n^2$for | |
| 6 | The multiplicative inverse of 0 is | A. 1<br>B. -1<br>C. 0<br>D. Does not exist |
| 7 | In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics | A. 40<br>B. 30<br>C. 50<br>D. 20 |
| 8 | The area enclosed between the graph $y = x^2 -4x$ and the x- axis is: | A. 20/3<br>B. 41/3<br>C. 32/3<br>D. 25/3 |
| 9 | The set { {a,b} } is | A. Infinite set<br>B. Singleton set<br>C. Two points set<br>D. Empty set |
| 10 | There may be _____ feasible solution in the feasible region | A. Infinite<br>B. Finite<br>C. Defined<br>D. None of above |
| 11 | If no two elements of ordered pairs of a function from A onto B are the same, then it is called | A. surjective<br>B. injuctive<br>C. bijective<br>D. on to |
| 12 | Question Image | |
| 13 | Question Image | A. 0<br>B. 1<br>C. 2<br>D. 3 |
| 14 | Question Image | |
| 15 | A,G,H are in | A. A.P<br>B. G.P<br>C. H.P<br>D. None of these |
| 16 | The point _____ is in the solution of the inequality 2x - 3y > 5 | A. (1, -1)<br>B. (2,2)<br>C. (0,0)<br>D. (3,0) |
| 17 | The solution set of the inequality ax + by < c is | A. straight line<br>B. half plane<br>C. parabola |

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| | | C. parabola<br>D. none of these |
| 18 | If $f(x) = ax^2$, and $a>0$, then the lowest point on the parabola is called. | A. Vertex of parabola<br>B. Co-ordinates of parabola<br>C. Roots of the equation<br>D. Coefficient of the equation |
| 19 | Question Image | |
| 20 | Question Image | D. none of these |