

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	In translation of axes, _____ is shifted to another point in the plane.	A. a-axis B. y-axis C. origin D. Point
2	The ortho center of triangle whose vertices are (0,0)(3,0)(0,4) is	A. (0,0) B. (1,1) C. (2,2) D. (3,3)
3	All men are mortal, We are men, there fore, we are also mortal. This is a useful example of	A. Deduction B. Induction C. Conjunction D. disjunction
4	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
5	Question Image	D. none of these
6	Question Image	D. none of these
7	A fraction in which the degree of the numerator is less the degree of the denominator is called	A. Polynomial B. Proper fraction C. Rational fraction D. None
8	The probability that a slip of numbers divisible by 4 is picked from the slips of number 1,2,3,4,.....10 is	A. 1/5 B. 2/5 C. 1/10 D. 3/10
9	Question Image	A. The law of sines B. The law of cosines C. The law of tangents D. None of these
10	pth term of an H.P. is qr and qth term is pr then the rth term of the H.P. is	A. pqr B. 1 C. pq D. $pqr^{p+q-2}$
11	Range of $\sec \theta$ is	A. $Z - \{x \mid -1 \leq x \leq 1\}$ B. $W - \{x \mid -1 \leq x \leq 1\}$ C. $R - \{x \mid -1 \leq x \leq 1\}$ D. R
12	Extraction of square root of a given number is a	A. unary operation B. binary operation C. group D. inverse function
13	Question Image	A. A B. 0 C. Unit vector D. None
14	Question Image	
15	If $x^2 + y^2 = 1$ , then $dy/dx$	A. y/x B. -x/y C. 1/x D. None of these
16	Domain of $\sin x$ is _____	
17	Question Image	
18	If $x - 2$ is a factor of $ax^2 - 12x + a = 2a$ , then $a =$ _____	A. -5 B. 5 C. 0 D. 1

19 Which of the following statement, is true

- A. Lahore is in Punjab and  $5 > 7$
- B. Lahore is the capital of Pakistan and  $3 < 23$
- C. Lahore is capital of Sindh and  $2+2=7$
- D. Lahore is the capital of Sindh or  $2+2 = 4$

20 If  $Z_1 = 1 + i$ ,  $Z_2 = 2 + 3i$ , then  $|Z_1 - Z_2| = ?$