

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The number of 5-digit number that can be formed from the digits 1,2,4,6,8, when 2 and 8 are never together is	A. 72 B. 48 C. 144 D. 20
2	Period of $\tan x$ is _____	
3	The circular measure of the angle between the hands of a watch of 4 0'clock is	A. $\pi/2$ B. $\pi/4$ C. $2\pi/3$ D. $\pi/6$
4	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a circle C. a parabola D. a hyperbola
5	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
6	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
7	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
8	$x = \sin^{-1} 3$ , then the value of $\sin x$ is	A. $\sqrt{3/2}$ B. 3 C. Not possible D. -1
9	$(x^3 - 1/2x)^6$ is	A. $15/16 x^{<sup>2</sup>}$ B. $2/13 x^{<sup>2</sup>}$ C. $17/7 x^{<sup>2</sup>}$ D. $16/15 x^{<sup>2</sup>}$
10	Which of the following is surjective	
11	Which one is not defined $\forall n \in \mathbb{Z}^+$	A. $-n!$ B. $n!$ C. $(-n)!$ D. $n! + 0! = n! + 1$
12	$\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$ , if $x > y$	D. None of these
13	$(0.90)^{1/2}$ is equal to	A. 0.99 B. 0.90 C. 0.80 D. 0.88
14	The positive integer just greater than $(1 + 0.0001)^{10000}$ is	A. 4 B. 5 C. 2 D. 3
15	Which of the following is a scalar.	A. electric field B. magnetic field C. weight D. mass
16	The roots of $(b-c)x^2 + (c-a)x + a-b = 0$ are equal if	A. $2b = a+c$ B. $2a = b+c$ C. $2c = a+b$ D. $a + b + c = 0$
17	Multiplicative inverse of "1" is	A. 0 B. $\pm 1$ C. 1 D. $\{0, 1\}$
18	If sides of $\triangle ABC$ are 16, 20, and 33, then the value of the greatest angle to	A. $150^\circ$ B. $132^\circ$ C. $101^\circ$ D. $160^\circ$
		A. true

19 If  $p$  is false,  $\sim p$  is

- B. not true
- C. equal to  $p$
- D. conjunction

20 Matrices  $A = [a_{ij}]$   $2 \times 3$  and  $B = [b_{ij}]$   $3 \times 2$  are suitable for

- A.  $BA$
- B.  $A^2$
- C.  $AB$
- D.  $B^2$