

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If $A \cap B = B$, then $n(A \cap B)$ is equal to	A. $n(a)$ B. $n(a) + n(c)$ C. $n(c)$ D. None of these
2	The distance between the parallel lines $3x - 4y + 3 = 0$ and $3x - 4y + 7 = 0$ is:	A. $2/3$ B. $9/13$ C. $4/5$ D. $7/12$
3	The law of sines can be used to solve oblique triangle when following information is given:	A. Two angles and a side B. Two sides and an angle opposite one of the given sides C. Two sides and the angle between two sides D. Option a and b
4	If $f(x) = x^3 - 2x^2 + 4x - 1$ then $f(0)$ is	A. 0 B. 1 C. -1 D. none of these
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	Which of the following are valid roots of $3x^3 - 8x^2 - 5x + 6$	A. -1 B. 3 C. 1 D. Both A and B
7	The domain of the function $y = \sin x$, is	A. $-\pi/2 \leq x \leq \pi/2$ B. $\pi/2 \leq x \leq \pi$ C. $-2\pi \leq x \leq 2\pi$ D. $-1 \leq x \leq 1$
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 2 C. 0 D. None of these
10	$\cot \theta = \sin 2\theta$ if $\theta =$	
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $x^3 - x^2 + x + c$ B. $6x - 2 + c$ C. $x^3 - 2x + c$
12	The condition for polynomial equation $ax^2 + bx + c = 0$ to be quadratic is	
13	$\sim p$ is the	A. implication of p B. disjunction of p C. negation of p D. conjunction of p
14	If $3x^{2-6} - 9^{x+1} = 0$ then the valid values of are.	A. (4,2) B. (2,1) C. (0,1) D. (3,-3)
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. A' C. U D. None of these
16	If $ ai + (a+1)j + 2k = 3$ then value of a is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
17	Roots of the equation $x^2 + 5x - 1 = 0$ are	A. Rational B. Irrational C. Complex

D. None of these

18 $7^{2n} + 3^{n-1} \cdot 2^{3n-3}$ is divisible by

- A. 24
- B. 25
- C. 9
- D. 13

19 Two coins are tossed twice each. The probability that the head appears on the first toss and the same faces appear in the two tosses is

- A. $\frac{1}{4}$
- B. $\frac{1}{2}$
- C. $\frac{1}{3}$
- D. $\frac{1}{7}$

20 In common logarithm the base is

- A. 1
- B. 0
- C. 10
- D. e