

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Six boys and 3 girls are to be seated at random, in a row, for a photograph. The probability that no two girls will sit together is	A. 1/12 B. 1/6 C. 5/12 D. 7/12
2	Question Image	
3	The trigonometric equation contains..... trigonometric functions	A. At least one B. At most one C. Exactly one D. None
4	Question Image	
5	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
6	Which of the following is not a solution of system of inequalities $2x - 3y \leq 6, 2x + y \geq 2, x + 2y \leq 8, x \geq 0, y \geq 0$	A. (1,0) B. (0,4) C. (3,0) D. (8,0)
7	$w^{28} + w^{38} =$ _____	A. 0 B. 1 C. w D. -1
8	Question Image	
9	Question Image	A. I B. 14 I C. 0 D. None of these
10	A function from X to Y is written as	B. $f : X \text{ to } Y$ D. $f : Y \text{ to } Y$
11	$w^{29} =$ _____	A. 0 B. 1 C. w D. $w^{>2}</sup>$
12	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
13	Question Image	A. Proper fraction B. Improper fraction C. Rational fraction D. None of these
14	If $A \subseteq B$ then $A \cup B$ is	A. A B. B C. A' D. $A \cap B$
15	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
16	Question Image	
17	Question Image	
18	Question Image	A. $\cos 2x + c$ B. $-\cos 2x + c$ C. $\tan 2x + c$ D. $\cot 2x + c$

19 If $\theta = 60^\circ$ then

34); font-family: "Times New Roman"; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"><i> θ </i>= $\frac{1}{2}$

B. \tan <i> θ </i>= $\cot 30^\circ$

C. \sec <i> θ </i>= <i> π </i>/4

D. \sec <i> θ </i>= 4

20 Range of cosec x is _____

- A. $\{-1, 1\}$
- B. \mathbb{R}
- C. Negative real numbers
- D. $\mathbb{R} - \{x \mid -1 \leq x \leq 1\}$