

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The angles of elevation of the top of a tower at the top and the foot of a pole of height 10 m are $30^\circ$ and $60^\circ$ respectively. The height of the tower is	A. 10 m B. 15 m C. 20 m D. None of these
2	if $\tan\theta = 8/15$ and $\cos\theta < 0$ , then $\csc\theta =$	A. $-8/15$ B. $15/8$ C. $3/15$ D. $-17/8$
3	If A and B are two sets then any subset R of $A \times B$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
4	Question Image	
5	If the number of elements in set A is n, and in set B is m, then the number of elements in $A \times B$ will	A. $n \times m$ B. $m \times n$ C. $m \times n$ D. $m + n$
6	If three unequal numbers p, q, r are in H.P. and their squares are in A.P., then the ration p : q : r is	
7	Question Image	
8	The set Q	A. Forms a group under addition B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
9	Question Image	A. $ab = -1$ B. $ab = 1$ C. $ab = 2$ D. None
10	Question Image	A. 1 B. 2 C. $3/2$ D. $5/2$
11	The set $\{Z \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
12	Question Image	A. 3 B. 6 C. 0 D. None of these
13	If A is such that a,A,B are in A.P then A is called	A. A.M B. Common ratio C. Common difference D. None of these
14	The value of n, when ${}^nP_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
15	The number z so that the triangle with vertices A(1,-1,0),B(-2,2,1)and C(0,2,z) is a right triangle with right angle at vertex C	A. 1,2 B. -1,-2 C. 2,-1 D. -2,1
16	A matrix with a single row is called a	A. Column matrix B. Row matrix C. Null matrix D. Identity matrix
		A. 0 B. 1 C. 4

17 The area of circle of unit radius =

D. π

18 Question Image

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 Question Image

- A. K/6
- B. 2K
- C. 3K
- D. 6K