



## Mathematics ECAT Pre Engineering Online Test

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	Question Image	
4	Question Image	D. all are correct
5	Question Image	
6	Rank of matrix $\begin{bmatrix} 1 & 3 & 5 & 0 \end{bmatrix}$ is	A. 1 B. 3 C. 2 D. 4
7	Question Image	A. 5 C. -5 D. none
8	Question Image	A. $k^3$ B. 0 C. $3k$ D. $k^6$
9	Which of the following is skew symmetric matrix	
10	If A is skew Hermitian Matrix then which of the following is not skew Hermitian matrix	A. $A^2$ B. $A^5$ C. $A^3$ D. $A^7$
11	Question Image	
12	Question Image	D. all
13	Question Image	A. $(2x+a+b+c)$ B. $(a+b+c)$ C. $(a+b+c+x)$ D. 0
14	Question Image	A. 16 B. 256 C. 64 D. 1024
15	Question Image	A. $l^3$ B. $rl^3$ C. r D. none
16	Question Image	A. 5 B. 15 C. 10 D. 20
17	Question Image	A. $(2 \times 4)$ B. $(2 \times 7)$ C. $(2 \times 3)$ D. $(7 \times 2)$
18	Question Image	
19	Question Image	A. 3K B. $K^2$ C. $K^3$ D. K
20	Question Image	
21	Under multiplication, solution set of is	A. Groupoid B. Abelian group C. Semi group D. All of these

22	Identity w.r.t intersection in a power set of any set is	A. $\emptyset$ B. Set itself C. Singleton set D. $\{0\}$
23	Which symbolic notation represent unary operation ?	A. - B. $\vee$ C. $\wedge$ D. $\Leftrightarrow$
24	Which conjunction is not true ?	
25	Power set of difference set N-W is	A. Empty set B. Infinite set C. Singleton set D. $\{0, \emptyset\}$
26	Question Image 	A. A onto B B. both a & c C. A into B D. none of these
27	Question Image 	A. $a-b=ab$ B. $ab=a$ C. $a+b=ab$
28	Group of none-singular matrices under multiplication is	A. None-Abelian group B. Semi group C. Abelian group D. None of these
29	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
30	The identity element of a set X with respect to intersection in $P(x)$ is	A. X B. Does not exist C. $\emptyset$ D. None of these