


## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. additive property <b>B. multiplicative property</b> C. additive identity D. multiplicative identity
2	When a selection of object is made without paying regard to the order of selection, it is called	A. Sequence B. Series <b>C. Combination</b> D. Permutation
3	If $3x^4 + 4x^3 + x - 5$ is divided by $x + 1$ , then the remainder is	A. 0 B. 7 <b>C. -7</b> D. 5
4	If a set S contains n elements then P (S) has ..... number of elements	<b>A. <math>2^n</math></b> B. $2^{n-1}$ C. 2.n D. $n^2$
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	A rule or correspondence that assigns to each element x in X a unique element y in Y is called a function from	A. X to X <b>B. X to Y</b> C. Y to X D. none of these
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Hermitian matrix <b>B. Skew-hermitian matrix</b> C. Symmetric matrix D. Identity matrix
8	Cofactor of an element $a_{ij}$ is defined by	A. $(-1)^{i+j} A $ <b>B. <math>(-1)^{i+j}M_{ij}</math></b> C. $(-1)^{i+j}M_{ij}$ D. None of these
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. At B. -A <b>C. A</b> D. A-1
10	The key for opening a door is in a bunch of 10 keys. A man attempts to open the door by trying the keys at random discarding the wrong key. The probability that the door is opened in the 5th trial is	<b>A. 1 / 10</b> B. 2 / 10 C. 3 / 10 D. 4 / 10
11	If $\sin \theta = 12/13$ , and $\sin \theta > 0$ , then $\tan \theta =$	A. 2/5 B. 12/13 C. 13/5 <b>D. 12/5</b>
12	If $ a \times b ^2 + (a,b)^2 =$ _____	A. $ a ^2 +  b ^2$ B. $ a ^2 -  b ^2$ C. $ a ^2 b ^2$ <b>D. None</b>
13	A square matrix all of whose elements except the main diagonal are zeros is called a	A. Null matrix B. Singular matrix C. Symmetric matrix <b>D. Diagonal matrix</b>
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	<b>D. all</b>
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Closure law of addition B. Associative law of addition <b>C. Commutative law of multiplication</b> D. Associative law of multiplication
16	H.M. between 3 and 7 is	<b>A. radius of the circle</b> B. circumference
..	radian is the measure of the angle subtended at the centre of the circle by an arc whose	

17. Radius is the measure of the angle subtended at the centre of the circle by an arc, whose length is equal to the
- C. arc length  
D. tangent of the circle  
E. none of these
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18. 
- A. quadratic function  
B. constant function  
C. linear function  
D. exponential function
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19. Form a group of 5 men and 3 women, a committee of 4 persons is to be selected randomly. The probability that there is a majority of men is
- A.  $\frac{1}{4}$   
B.  $\frac{1}{3}$   
C.  $\frac{1}{2}$   
D.  $\frac{1}{6}$
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20. A function in which the second elements of the order pairs are distinct is called
- A. Onto function  
B. One-one function  
C. Identity function  
D. Inverse function