

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The identity function is	A. surjective B. injective C. bijective D. into
2	In quadratic equation, if the replacement of y with $-y$ leaves the equation unchanged, then the graph is	A. Straight line B. Circle C. Hyperbola D. Symmetric w.r.t.0
3	The first three terms in the expansion of $(1 - x)^{-3}$ are	A. $1 + 3x + 6x^2$ B. $1 - 3x + 6x^2$ C. $-3 - 3x - 6x^2$ D. $1 - 3x - 6x^2$
4	Every real number is	A. A complex number B. A rational number C. A natural number D. A prime number
5	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
6	<input style="width: 100%; height: 15px;" type="text" value="Question Image"/>	
7	The sets $\{1, 2, 4\}$ and $\{4, 6, 8, 10\}$ are	A. Equal sets B. Equivalent sets C. Disjoint sets D. Overlapping sets
8	The set $\{-1, 1\}$ is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
9	If $f(x) = \tan x$ then $f(0)$ is	A. 0 B. 1 C. $1/2$
10	<input style="width: 100%; height: 15px;" type="text" value="Question Image"/>	A. 0 B. 20 C. 90 D. 80
11	Cofactor of an element a_{ij} denoted by A_{ij} is	A. $(-2)^{i+j}$ B. M_{ij} C. $(-1)^{i+j} M_{ij}$ D. None of above
12	The principal value of $\sin^{-1}(\sqrt{3}/2)$ is	A. $-\pi/3$ B. $\pi/3$ C. $2\pi/3$ D. $\pi/2$
13	For each natural number n , $n(n+1)$ is	A. an even B. an odd C. multiple of 3 D. Irrational
14	The number of non zero rows in echelon form of a matrix is called	A. Order of matrix B. Rank of matrix C. Row operation D. None of these
15	For any equilateral $\triangle ABC$ $r_1 : r_2 : r_3 =$	A. 1:2:3:4:5 B. 1:2:3:3 C. 1:2:4:4:4 D. 2:1 :2 :2 :2
16	The area of a sector of a circular region of radius r is	A. $2\pi r$ B. πr^2 C. $\frac{1}{2}\pi r^2$ D. πr^2

17 Question Image

18 Question Image

19 Question Image

- A. A
- B. 0
- C. Unit vector
- D. None

20 If θ be angle between u, v and u, v determine the sides of a triangle then the third side opposite to angle θ has length

- A. $|u+v|$
- B. $|u+|v|$
- C. $|u-v|$
- D. $|u|-|v|$