

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Which of the following are valid roots of $3x^3 - 8x^2 - 5x + 6$	A. -1 B. 3 C. 1 D. Both A and B
2	The square matrix A is skew-symmetric when $A^t =$	A. -B B. -C C. -A D. -D
3	$\forall a, b \in R, ab = ba$ is a	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplicative identity
4	The n numbers $A_1, A_2, A_3, \dots, A_n$ are called an arithmetic means between a and b if $a, A_1, A_2, A_3, \dots, A_n, b$ is _____	A. An arithmetic series B. An arithmetic sequence C. A geometric sequence D. A harmonic sequence
5	If $c = 2i + j + k$ and $d = -1 + 4j + 2k$, then $[c-d] =$	A. $\sqrt{7}$ B. $\sqrt{41}$ C. $\sqrt{19}$ D. $\sqrt{2 \& \# 7}$
6	If $ax + bx + c = 0$ is satisfied by every value of x, then	A. $b = 0, c = 0$ B. $c = 0$ C. $b = 0$ D. $a = b = c = 0$
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. -1 D. None
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	The principal value of $\sin^{-1}(\sqrt{3}/2)$ is	A. $-\pi/3$ B. $\pi/3$ C. $2\pi/3$ D. $\pi/2$
10	Range of $\cos x$ is _____	A. $[-1, 1]$ B. R C. Negative real numbers D. $R - \{x \mid -1 \& \# x \& \# 1\}$
11	$\forall x, y \in R$, either $x = y$ or $x > y$ or $x < y$ is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
12	The value of $7\pi/9$ in terms of degrees is	A. 150° B. 130° C. 135° D. 140°
13	The law of sines can be used to solve	A. Right angle triangle B. Isosceles triangle C. oblique triangle D. hexagon
14	If A and B are skew-symmetric then $(AB)^t$ is	A. $A^t B^t$ B. AB C. $-AB$ D. BA
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	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. X to Y C. Y to X D. none of these

A. Infinite

- 17 If $0 = \{1, 3, 5, \dots\}$, then $n(0) =$
- A. 99
B. Even numbers
C. odd integers
D. 99
-
- 18 Which of the following is skew symmetric matrix
-
- 19 If A is skew Hermitian Matrix then which of the following is not skew Hermitian matrix
- A. A2
B. A5
C. A3
D. A7
-
- 20 If $x^3 + ax^2 - a^2x - a^3$ is divided by $x + a$, then the remainder is
- A. 0
B. a^3
C. $2a^3$
D. $-2a^3$