

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	$\forall a, b \in \mathbb{R}, ab = ba$ is a	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplicative identity
2	The transpose of a row matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
3	Axes remain parallel to the old axes, in:	A. Translating of axes B. rotation of axes C. Translation and rotation of axes D. None of these
4	Question Image <input style="width: 300px; height: 20px;" type="text"/>	A. 1 B. 2 C. 3 D. 4
5	If G is the centroid of the triangle, then $GA + GB + GC =$	A. 0 B. 1 C. -1 D. 3
6	The exact degree value of the function $\sin^{-1}(\frac{\sqrt{3}}{2})$ is	A. 70° B. 50° C. 90° D. 60°
7	Domain of $\cot x$ is _____	
8	A man of height 6 ft observes the top of a tower and the foot of the tower at angles of 45° and 30° of elevation and depression respectively. The height of the tower is	
9	The value of $\sin^{-1} \frac{24}{25}$ is equal to	A. $\csc^{-1} \frac{25}{24}$ B. $\sec^{-1} \frac{24}{25}$ C. $\tan^{-1} \frac{4}{5}$ D. $2\cos^{-1} \frac{24}{25}$
10	The additive identity of real number is	A. 1 B. 2 C. $\frac{1}{2}$ D. $-\frac{1}{2}$
11	The positive real number which is the measure of the length of a vector is called the	A. Unit vector B. Modulus C. Inverse D. None of these
12	What is the period of $\tan \frac{4}{3} x = ?$	A. $\frac{\pi}{4}$ B. $\frac{4\pi}{3}$ C. $\frac{7\pi}{4}$ D. $\frac{3\pi}{4}$
13	The roots of the equation $x^2 + 6x - 7 = 0$, are	A. 1 B. 2 C. 1 and -7 D. -7
14	10 is an even number or 0 is a natural number, then truth value of this disjunction is	A. false B. true C. not discussed D. negation of first
15	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 D. Diagonal matrix
16	$(1+w)(1+w^2)(1+w^4)(1+w^8)\dots$ 50 factors	A. 0 B. -1 C. 1 D. 2

17

Question Image

- A. $(a + b)c = a \cdot c + bc$
- B. $a + b = b + a$
- C. $(a + b) + c = a + (b + c)$
- D. $a(b + c) = ab + ac$

18

The period of the trigonometric function $y = \sin x \cos x$ is

- A. 2π
- B. π
- C. 4π
- D. $\pi / 2$

19

A cone is generated by all lines through a fixed point and the circumference of

- A. a circle
- B. an ellipse
- C. a hyperbola
- D. none of these

20

Question Image

- A. Symmetric
- B. Skew-symmetric
- C. Hermitian
- D. Skew hermitian