

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The points A, B and C are said to be collinear if they:	A. be on same line B. have same slope C. Lie on a same plane D. options a & b
2	$7^{2n} + 3^{n-1} \cdot 2^{3n-3}$ is divisible by	A. 24 B. 25 C. 9 D. 13
3	If the centre of the circle is the origin, then equation of the circle is	A. $x^2 + y^2 = 0$ B. $2gx + 2fy - c = 0$ C. $x^2 + y^2 = r^2$ D. $gx + fy - c/2 = 0$
4	The corner point of the boundary lines, $x - 2y = 10$ is:	A. (8,1) B. (1,8) C. (6,10) D. (3,5)
5	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
6	Question Image <input style="width: 100%; height: 15px;" type="text"/>	
7	If y is an image of x under the function f, then we write	A. $y = f(x)$ B. $x = f(y)$ C. $y = x$ D. none of these
8	The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is always	A. Symmetric B. Hermitian C. Skew-symmetric D. None
9	Question Image <input style="width: 100%; height: 15px;" type="text"/>	A. 0 B. 1
10	$(x-1)$ is a factor of	A. $2x^3 - 3x^2 + 9$ B. $2x^3 - 5x - 8$ C. $48x^2 - 46x - 9$ D. $x^9 - 1$
11	The graph of $y > 0$ is the upper - half of:	A. y-axis B. x-axis C. 1st and 4th quadrant D. 2nd and 3rd quadrant
12	The upper 3/4 the portion of a vertical pole subtends an angle $\tan^{-1} 3/5$ at a point in the horizontal plane through its foot and at a distance 40 m from the foot. A possible height of the vertical pole is	A. 20 m B. 40 m C. 60 m D. 80 m
13	Question Image <input style="width: 100%; height: 15px;" type="text"/>	A. $ab = -1$ B. $ab = 1$ C. $ab = 2$ D. None
14	Question Image <input style="width: 100%; height: 15px;" type="text"/>	C. 0 D. 1
15	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
16	The general value of θ satisfying the equation $2 \sin^2 \theta - 3 \sin \theta - 2 = 0$ is	
17	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$ then which expression defines the product of z_1 and z_2	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $6 + 11i$

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- 18 Addition is not operation on
- A. Natural numbers
B. Even numbers
C. odd numbers
D. set of integers
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- 19 The 6th term of an arithmetic sequence whose first term is 3 and common difference in zero is
- A. 18
B. 6
C. 3
D. 0
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- 20 
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