

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A class contains nine boys and three girls, in how many ways can the teacher choose a committee of four?	A. 60 B. 460 C. 495 D. 272
2	The roots of $ax^2 + bx + c = 0$ are always unequal if	A. $b^2 - 4ac = 0$ B. $b^2 - 4ac \neq 0$ C. $b^2 - 4ac > 0$ D. $b^2 - 4ac \geq 0$
3	The middle term of $[1/x-x]^10$ is	A. -152 B. -252 C. 371 D. -421
4	The period of $3 \sin x$ is	A. 2π B. 9π C. 3π D. 5π
5	If $A \subseteq B$, and B is a finite set, then	A. $n(A) < n(B)$ B. $n(B) < n(A)$ C. $n(A) \leq n(B)$ D. $n(A) \geq n(B)$
6	$x^2 + x - 5 = 0$ is	A. A polynomial B. An inequality C. An identity D. None
7	Name the property used in $100 + 0 = 100$	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
9	Given two independent event A and B such that $P(A) = 0.30$ and $P(B) = 0.60$. Probability of getting neither A nor B is	A. 0.28 B. 0.13 C. 0.12 D. 0.42
10	0.25 is _____	A. An irrational number B. A natural number C. A prime number D. A rational number
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $a \cot(ax + b) + c$ B. $-a \cot(ax + b) + c$
12	The coefficient of x^{10} in the expansion $(x^3 + 3/x^2)^{10}$ is	A. 1700 B. 17023 C. 17027 D. 17010
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. -8 B. 8 C. 8i D. 32
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $e^{x^2} + c$ B. $e^{-x^2} + c$ C. $x e^{x^2} + c$ D. not possible
17	The vector $i = [1,0]$ is called unit vector along:	A. x-axis B. y - axis C. z- axis D. Both a and y-axis

18	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
19	The law of sines can be used to solve oblique triangle when following information is given:	A. Two angles and a side B. Two sides and an angle opposite one of the given sides C. Two sides and the angle between two sided D. Option a and b
20	The liner equation $ax + by = c$ is called _____ of the inequality $ax + by > c$.	A. Associated equation B. Non-associated equation C. disjoint equation D. Feasible equation