

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Which one the valid rood of $3x^3 - 8x^2 - 5x + 8 = ?$	A. 4 B. 3 C. 8 D. A and B both
2	Write the first four terms of the arithmetic sequence 5, 2, -1, ... is	A. 3 B. -4 C. 7 D. 1
3	The product of complex numbers (a,b) and (c,d) is	A. (ac, bd) B. (ac-bd, ad+bc) C. (ab,cd) D. (ac+bd,ad-bc)
4	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. Closure law of addition B. Associative law of addition C. Commutative law of multiplication D. Associative law of multiplication
5	Period of Sine and Cosine function is	A. <span style="color: #0070c0;">&lt;span style="color: rgb(34, 34, 34); font-family: &amp;quot;Times New Roman&amp;quot;; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"&gt;&lt;i&gt;π&lt;/i&gt;&lt;/span&gt;</span> B. <span style="color: #0070c0;">2&lt;span style="color: rgb(34, 34, 34); font-family: &amp;quot;Times New Roman&amp;quot;; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"&gt;&lt;i&gt;π&lt;/i&gt;&lt;/span&gt;</span> C. <span style="color: #0070c0;">-&lt;span style="color: rgb(34, 34, 34); font-family: &amp;quot;Times New Roman&amp;quot;; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"&gt;&lt;i&gt;π&lt;/i&gt;&lt;/span&gt;</span> D. <span style="color: #0070c0;">-2&lt;span style="color: rgb(34, 34, 34); font-family: &amp;quot;Times New Roman&amp;quot;; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"&gt;&lt;i&gt;π&lt;/i&gt;&lt;/span&gt;</span>
6	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	A. X = 2, y = 1 B. X = -2, y = 1 C. X = 2, y = -1 D. X = 2, y = 2
7	$\sqrt[3]{8.6}$ is approximately equal to	A. 2.488 B. 2.48 C. 2.0488 D. 2.05
8	Differentiating the equation $(x-1)(x-2)^3$ with respect to x gives.	A. $2x(x+2)$ B. $2(x-1)$ C. $2(x-1)(x+2)$ D. $3x(x+2)$
9	The differential equation of all st. lines which are at a constant distance to form the origin is	
10	The matrix A is Hermitian when $(A)' =$	A. A B. -A C. A D. A'
11	$\sin h x =$ _____	
12	If S is a sample space and event set $E = \Phi$ then $P(E)$ is	A. $>0$ B. 1 C. $<1$ D. 0
		A. $x + y = 20$

13	Sum of two quantities is at least 20 is denoted by	B. $x + y \geq 20$ C. $x + y \neq 20$ D. $x + y \leq 20$
14	Question Image	
15	The angle between the vectors $3i + j - k$ and $2i - j + k$ is	
16	Question Image	A. Three Independent Variables B. Two independent constant C. Three independent parameters D. Three independent constant
17	If C is the mid point of AB and P is any point outside AB, then	
18	The set of whole numbers is subset of	A. The set on integers B. The set of natural numbers C. $\{1, 3, 5, 7, \dots\}$ D. The set of prime numbers
19	The number of solution of the equation $\tan x + \sec x = 2 \cos x$ lying in the interval $[0, 2\pi]$ is	A. 0 B. 1 C. 2 D. 3
20	The number of 5-digit number that can be formed from the digits 1,2,4,6,8, when 2 and 8 are never together is	A. 72 B. 48 C. 144 D. 20