

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Two coins are tossed twice each. The probability that the head appears on the first toss and the same forces appear in the two tosses is	A. 1/4 B. 1/2 C. 1/3 D. 1/7
2	For any integer k, $w^n = \text{_____}$ when $n = 3k$	A. 1 B. 2 C. 0 D. -4
3	Question Image	A. $k^3$ B. 0 C. $3k$ D. $k^6$
4	Question Image	A. quadratic function B. constant function C. linear function D. exponential function
5	Question Image	
6	Question Image	
7	If $\sin \alpha$ and $\cos \alpha$ are the roots of the equation $px^2 + qx + r = 0$ , then	A. $p^2 - q^2 + 2pr = 0$ B. $(p + r)^2 - q^2 = 0$ C. $p^2 - q^2 + q^2 - 2pr = 0$ D. $(p - r)^2 - q^2 = 0$
8	The graph of a constant line is	A. vertical line B. parabola C. circle D. horizontal line
9	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule of fractions D. Rule for quotient of fractions
10	By expressing $\cos 113^\circ$ in terms of trigonometrical ratios, answer will be	A. $-\cos 76^\circ = -0.7093$ B. $-\cos 65^\circ = -0.4258$ C. $-\cos 67^\circ = -0.3907$ D. $-\cos 62^\circ = -0.8520$
11	The set of real numbers is a subset of	A. The set of natural numbers B. The set of rational numbers C. The set of integers D. The set of complex numbers
12	Question Image	
13	The value of x for which the polynomials $x^2 - 1$ and $x^2 - 2x + 1$ vanish simultaneously is	A. 2 B. 1 C. -1 D. -2
14	If A and B are two matrices such that $AB = B$ and $BA = A$ , then $A^2 + B^2 =$	A. 2 AB B. 2 BA C. A + B D. AB
15	$2x + 3 < 0$ is.	A. Inequality B. Equality C. Identity D. None

16	Question Image	<p>A. Rational</p> <p>B. Irrational</p> <p>C. Even</p> <p>D. Odd</p>
17	Question Image	<p>A. are real no</p> <p>B. both are not real</p> <p>C. are imaginary no</p> <p>D. both are imaginary</p>
18	Let the real valued function F and G be defined by $f(x) = 2x + 1$ and $g(x) = x^2 - x$ . The expression $fg(x)$ is given by?	<p>A. <math>2x^2 - x + 1</math></p> <p>B. <math>2x^2 - 2x + 1</math></p> <p>C. <math>2x^2 - x + 2</math></p> <p>D. <math>x^2 - x + 1</math></p>
19	Deductive logic in which every statement is regarded as true or false and there is no other possibility is called	<p>A. deductive logic</p> <p>B. inductive logic</p> <p>C. Aristolian logic</p> <p>D. non-Aristolian logic</p>
20	If n is any positive integer then $4^n > 3^{n+4}$ is true for all	