

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The ortho center of triangle whose vertices are (0,0)(3,0)(0,4) is	A. (0,0) B. (1,1) C. (2,2) D. (3,3)
2	An even function is symmetric about the line	A. $y = x$ B. $x = 0$ C. $y = -x$ D. $y = 0$
3	The period of the trigonometric function $y = \sin x \cos x$ is	A. 2π B. π C. 4π D. $\pi / 2$
4	In $(x + iy)^n$ y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
5	A bag contains 5 white, 7 red and 5 black balls. If four balls are drawn one by one with replacement, the probability that none is white is	A. $(11/16)^2$ B. $(5/16)^2$ C. $(11/16)^4$ D. $(5/16)^4$
6	The number of subset of $\{0\}$ is	A. 1 B. 2 C. 3 D. None
7	Union of the sets of rational and irrational numbers is called 6th set of	A. Natural numbers B. Real numbers C. Whole numbers D. Prime numbers
8	$\sin^{-1}(\sin 2\pi/3) =$	A. $\pi/2$ B. $2\pi/3$ C. $-3\pi/2$ D. $\pi/3$
9	If $x^2 - 7x + a$ has remainder 1 when divided by $x + 1$, then $a =$ _____	A. -7 B. 7 C. 0 D. None of these
10	Period of $\sin x$ is	
11	Question Image	A. $a \sin(ax + b) + c$ B. $-a \sin(ax + b) + c$
12	$(ABC)' =$	A. CBA' B. CBA C. $C' B' A'$ D. None of these
13	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is	A. $1/6$ B. $1/3$ C. $1/2$ D. $2/3$
14	A circle which touches one side of a triangle externally and the other two sides produced is called _____	A. In-circle B. Circum circle C. Escribed circle D. None of these
15	The symbol _____ shall be used both for equation and identity	A. $\lt br \gt$
16	For all positive integral value of $n, 3^n < n!$, when	A. $n \gt; 6$ B. $n \lt; 6$ C. $n \lt; 11$ D. $n \gt; 11$
17	Question Image	

18	The number of arbitrary constants in the general solution of a differential equation is equal to the different equation	<div><div></div><div>A. Order</div><div>B. Degree</div><div>C. Variables</div><div>D. All are correct</div></div>
19	The area of the circle centred at (1, 2) and passing through (4, 6) is	
20	G is geometric mean between a and b if a, G, b is	<div><div>A. A.P.</div><div>B. G.P.</div><div>C. H.P.</div><div>D. None of these</div></div>