ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The horizontal distance between the two towers is 60 m. the angular elevation of the top of the taller tower as seen from the top of the shorter one is 30°. If the height of the taller tower is 150 m, the height of the shorter one is	A. 116 m B. 200 m C. 216 m D. None of these
2	If $f(x) = x^2 - x$ then f(-2) is	A. 4 B. 6 C. 2 D. 0
3	Ifα,β are non-real roots of ax2 + bx +c =0 (a,b,c∈ Q),then	A. α = β B. αβ = 1 C. α = β D. α = 1
4	If $f(x) = x^5 + x^3 + x$ the value of $f^1(1)$ is:	A. 0 B. 8 C. 5 D. 9
5	The general term of a sequence is denoted by	A. a₁ B. a_n C. n D. s_n
6	If the sum of two unit vectors is a unit vector the the magnitude of their difference is	A. √2 B. √3 C. 1 D. None of these
7	The equation: $x^2 + y^2 + 2gx + 2fy + c = 0$, represents	A. pair of lines B. a circle C. a general second degree equation D. a hyperbola
8	Which is in the solution set of 4x - 3y < 2	A. (3, 0) B. (4, 1) C. (1, 3) D. None
9	Riaz, Saba. Maria, Shehzad are to give speeches in a class. The teacher can arrange the order of their presentation in	A. 4 ways B. 12 ways C. 256 ways D. 24 ways
10	The 26th term of the A.P -2,-4,10,.....is	A. 136 B. -136 C. 148 D. -148
11	Question Image	
12	Question Image	A. Principle of equality of Fractions B. Rule for product of fraction C. Golden rule of fraction D. Rule of quotient of Fraction
13	A person standing on the bank of a river observes that the angle of elevation of the top of a tree on the opposite bank of the river is 60° and when he retires 40 meters away from the tree the angle of elevation becomes 30°. The breadth of the river is	A. 40 m B. 30 m C. 20 m D. 60 m
14	A quadratic equation in x is an equation that can be witten in the form	A. ax²+ b = 0 B. ax³ +b²+c=0 C. ax² +bx+c=0 D. ax³ +bx³+cx=0
15	The projection of -2i + 3j+7k on 2j + k is	A. 13/5 B. 13/4 C. 13/ square 5 D. 13

16	The 7th term of the A.P 7,11,15,is	A. 24 B. 31 C. 26 D. 23
17	nCn-r is equal to	A. n! B. n-1Cr C. nCr D. None of these
18	Domain of cosh x is	A. R B. R -{0} C. [1,∞) D. [0,∞)
19	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
20	$f(x) = 2^{x} + 3 \cdot 2^{2x} + 5$ is	A. trigonometric function B. algebraic function C. exponential function D. logarithmic function