ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	$\forall$ a ε R $\exists$ o ε R such that a + v = 0 + a = a is property of	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse
2	In quadratic equation, if the replacement of y with -y leaves the equation unchanged, then the graph is	A. Straight line B. Circle C. Hyperbola D. Symmetric w.r.t.0
3	Domain of $\cot\theta$ is	
4	Power set of X i.e P(X)..........under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
5	Roots of the equation $x^2 - 7x + 10 = 0$ are	A. {2, 5} B. {-2, 5} C. {2,5} D. {-2,-5}
6	If the cutting plane is parallel to the axis of the cone and intersects both of its nappes, then the curve of intersection is	A. an ellipse B. a circle C. a parabola D. a hyperbola
7	If |αi + (α+1)j +2k| =3 then value of α is	A. 1,2 B. -1,-2 C. 1,-2 D. -1,2
8	If one root of the equation $x^2 - 3x + a = 0$ is 2 then a = _____	A. 0 B. 1 C. 2 D. 3
9	Question Image	A. 1 B. 0 C. 3 D. -1
10	Vector $\underline{i}$ =	A. [1,0] B. [0,1,0] C. [0,0,1] D. None of these
11	Question Image	A. Set of whole number B. Rational Numbers C. Complex numbers D. Whole numbers
12	A fraction in which the degree of the numerator is less the degree of the denominator is called	A. Polynomial B. Proper fraction C. Rational fraction D. None
13	If the angle between two vectors with magnitude 6 and 2 is 60° when their scalar product is	A. 12 B. 6 C. 3 D. 0
14	If $y = 1/x^2$ then dy/dx equals:	A. -2x B. x^{-3} C. $-2/x^3$ D. $-2x^3$
15	The order axioms are satisfied by set of	A. C B. C and R C. R D. None of these
16	If $\sin 6\theta + \sin 4\theta + \sin 2\theta$, then θ =	

17	Question Image	
18	The set of even prime numbers is	A. (2,4,6,8,10} B. {2,4,6,8,10,12} C. {1,3,5,7,9} D. {2}
19	Question Image	
20	There will be no inverse if the function is	A. one -to - one B. One to many C. onto D. into