ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	
3	An A.P. consists of n(odd terms) and its middle term is m. then the sum of the A.P. is	A. 2 mn B. 1/2 mn C. mn D. mn²
4	1,1/3,1/5,1/7,1/9..... is a	A. geometric sequence B. finite sequence C. infinite sequence D. arithmetic series
5	If a force F = 2i + j +3k acts at point (1,-2,2) of a body then the moment of F about a pint lying on the line of action of the force is	A. 5 B. Equal to the moment of the force about origin C. 0 D. Cannot be found
6	The roots of the equation $ax^2+ bx + c = 0$ are complex/imaginary if	A. b²- 4ac < 0 B. b²- 4ac = 0 C. b²- 4ac > 0 D. None of these
7	If A = {x/x is a positive integer and 4≤x<23}, then A=	A. {1,2,3,4,5,6,7} B. {4,5,6.....22} C. {1,2,3,.....23} D. {1,2,3,4,5}
8	Question Image	
9	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
10	Question Image	A. 0 B. 1 C. -2 D. 10
11	An observer on the top of a cliff 200 m above the sea level, observes the angles of depression of two ships on opposite sides of the cliff to be 45° and 30°, respectively. The distance between the ships if the line joining them points to the base of cliff is	
12	If $a_1$and r are the first term and the common ratio respectively then (n + 1)th term of the G.P. is	A. 0 B. a₁rⁿ⁻¹ C. a₁rⁿ⁺¹ D. a₁rⁿ
13	Domain of cos$\theta$is	A. Set of odd numbers B. Set of integers C. Set of real numbers D. Set of complex numbers
14	Question Image	
15	1/2,1/3,1/4,1/5.....is	A. a geometric sec B. an arithmetic series C. finite sequence D. an infinite sequece
16	On simplifying the express in sin2O/1+Cos 2O the result is.	A. Sin O B. CotanO C. Tan O D. Sec O
17	If sin$\alpha$and cos$\alpha$are the roots of the equation $px^2+ qx + r =0$, then	A. p²- q²+ 2pr = 0 B. (p + r)²= q²- r² C. p²+ q²- 2pr = 0

		D. (p - r)²= q²+ r²
18	Question Image	A. 8 B. 1/56 C. 56 D. None of these
19	Question Image	A. 1 B. -1
20	If cosθ = 9/41 and sinθ< 0, the tanθ =	A. 41/9 B. -40/9 C. 9/10 D. 3/20