GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	Find the geometric mean between 4 and 16	A. 7, 8 B. 14, 4 C. 28, 2 D. 56, 1
2	Cos^{-1} (-x) =_____.	A. π +cos⁻¹ x B. π -sin⁻¹ x C. π +sin⁻¹ x D. π -cos⁻¹ x
3	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
4	In the triangle Δ ABC, where C is the right angle Tan A + Tan B=	A. A +B B. C² /AB C. A²/BC D. B²/AC
5	The set (Z, +) forms a group	A. Function on B B. Range C. Domain D. A into B
6	If |A| ≠ 0 then A is called	A. 1 B. -1 C. ±1 D. 0
7	The curves y =x^2, y= x interest at	A. (0,0) ,(1,1) B. (2,4) C. (0,),(2,4) D. (0,3),(-1,1)
8	The set { {a,b} } is	A. {X/X∈ A∧x ∈ U} B. {X/X∉ A∧x ∈ U} C. {X/X∈ A and x ∉ U} D. A-U
9	The range of inequality x + 2 > 4 is	A. (-1,2) B. (-2,2) C. (1,∞) D. None
10	An angle of one radian is equivalent to	A. 90^o B. 60^o C. 67^o D. 57^o, 18^o
11	The value of Cos (1/2 Cos^{-1} 1/2) is equal to	A. √3/2 B. -3/4 C. 1/16 D. 1/4
12	Cse π/3	A. 2 B. 1 C. 0 D. 2/√3
13	P(x) = $2x^4$ -$3x^3$ +2x-1 is polynomial of degree	A. 1 B. 2 C. 3 D. 4
14	The end points of the major axis of the ellipse are called its	A. foci B. Vertices C. Co-vertices D. eccentricity
15	The set of complex numbers forms a group under the binary operation of	A. 0 B. ±1 C. 1 D. {0,1}

16	Every prime number is also	A. Rational number B. even number C. Irrational number D. multiple of two numbers
17	A standard deck of 52 cards shuffled what is the probability of choosing the queen of the diamonds	A. 1/5 B. 1/13 C. 5/52 D. 1/52
18	6 is	A. A prime integer B. An irrational number C. A rational number D. A odd integer
19	If Z_1 = √-36, Z_2=√-25, Z_3= √-16, then what is the sum of Z_1, Z_2 and Z_3 ?	A. √3 I B. √7 C. -2-1 D. √5
20	Which of the following is not defined?	A. Arcsin 1/9 B. ArcCos (-4/3) C. Arctan 11/12 D. Arccot (-4)