GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	If A and B are matrices of same order than (A + B)(A + B)=	A. addition B. multiplication C. subtraction D. None
2	A fraction in which the degree of the numerator is less than the degree of the denominator is called	A. 1-i √-3 / 2 B. -1+i √-3 / 2i C. -1+i √3 / 2 D. 1+i √3 / 2
3	Every prime number is also	A. Rational number B. even number C. Irrational number D. multiple of two numbers
4	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
5	In 30,60,90 triangle if the smallest side is 6 than the side opposite to the angle of 60^o is	A. 12 B. 3 C. 6√3 D. 6
6	If sinθ = 1 then θ =	A. 2nπ +π/2 B. 2nπ C. 2π +n D. Nπ +π/2
7	If ab > 0 and a < 0, which of the following is negative?	A. b B. -b C. -a D. (a - b)²
8	Graph of the equation $X^2 + y^2 = 4$ is	A. a circle B. an ellipse C. a parabola D. A square
9	An angle 0 is such that tan θ = 1 and cos θ is negative then	A. Sin θ is positive B. Cos θ = √2/4 C. cosθ = -1 D. sec θ is negative
10	If 4 - x > 5, then	A. x > 1 B. x > -1 C. x < 1 D. x < -1
11	Which of the following is solution of $Tan^2 x = 1/3$	A. 7π/6 B. 5π/6 C. π/6 D. All
12	x is a member of the set {-1,0,3,5} y is a member of the set {-2,1,2,4} which is possible?	A. x- y =-6 B. x -y < -6 C. x -y > 6 D. None
13	The set {1, -1, i, -i}, form a group under	A. addition B. multiplication C. subtraction D. None
14	Two dice are rolled The number of possible out come in which at least one die shows 2 is?	A. 5 B. 12 C. 11 D. 7
15	If p and r are integers P = 0, and p ≠ -r, which of the following must be true?	A. p < r B. p > r C. p + r < 0 D. p - r < -0

16	∫cot (ax + b) dx =	A. 1/a log |sin (ax + b)| +c B. 1/a log |cos ax + b) C. 1/b |sin (ax + b)| D. 1/a log |sin (bx + a)|
17	If α and β be irrational roots of a quadratic equation, then	A. α = b/a and β = ca B. α = a/b and β = -c/a C. α² + β² = 1 D. α = -b/a and β= c/a
18	Sin-1 (√2/2)=?	A. π/2 B. π/3 C. 3π/4 D. 2π
19	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The student enrolled for English cannot attend any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 20
20	The Domain of f(x) = log x is	A. [0,∞] B. (0, ∞) C. [0,∞[D. [∞ ,∞]