GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	The set (Q, .)	A. Infinite set B. Singleton set C. Two points set D. None
2	Derivative of strictly increasing function is always	A. Zero B. Positive C. Negative D. Both A and B
3	In general matrices do not satisfy	A. Not a group B. A group w.r.t. subtraction C. A group w.r.t. division D. A group w.r.t. multiplication
4	If f_1 (x) and f_2 (x) are any two anti derivatives of a function F (x) then the value of f_1 (x) = f_2 (x)	A. A variable B. A constant C. Undefined D. Infinity
5	If f (x) = x/x^2- 4 then which is not included in the domain of f(x)	A. 0 B. -2 C. 1 D. 4
6	The length of rectangle is twice as much as its breadth. If the perimeter is 120 cm, the length of the rectangle is	A. Same as the original determinant B. Additive inverse of the original determinant C. Both A and B D. Adj of the original matrix
7	Cos^{-1} x =	A. ∏ = sin⁻¹ x B. ∏ + sin⁻¹ x C. ∏/2 - sin⁻¹ x D. ∏/2 +sin⁻¹ x
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	Sin 720° = _____	A. 1 B. 0 C. 2 D. 1/2
10	For any set X, X∪X is	A. 15 B. 15i C. -15i D. -15
11	The equation of the line with gradient 1 passing through the point (h,k) is	A. Y = x+ k-h B. Y = k/hx +1 C. Y = x + h -l D. Ky = hx =1
12	If the diagonal of a square has coordinates (1,2) and(5,6) the length of a side is	A. 3 B. 4 C. 1 D. 5
13	How many different arrangements of the letters in the word QABABA are Possible?	A. 720 B. 40 C. 60 D. 30
14	The sum of the interior angles for a 16 sided polygon is	A. 0 B. ω C. 1 D. 1 / ω
15	Sin (2π -θ) =_____.	A. Cosθ B. -Sinθ C. -Sinθ

		D. -cosθ
16	Which is not a half plane	A. ax + by < c B. ax + by > c C. Both A and B D. None
17	Which is not included in the domain of Cos^{-1} x	A. 0 B. 1 C. -1 D. 2
18	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
19	If a line passes through origin then the equation of the line is	A. y = m/x B. y = mx C. x = my D. None
20	0 (zero) is	A. A irrational number B. A rational number C. A negative integer D. A positive number