GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	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
2	Find the geometric mean between 4 and 16	A. 7, 8 B. 14, 4 C. 28, 2 D. 56, 1
3	8 > t then	A. (s -t) ²>(t -8) ² B. (s -t) ²<(t -8) ² C. (s -t) ²=(t -8) ² D. None
4	The multiplicative inverse of -1 in the set {1-,1} is	A. 40 B. 30 C. 50 D. 20
5	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
6	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
7	Sin(a + b) + Sin(a- b) =	A. Sin a Cos b B. Sin a Sin b C. Sin a + Cos b D. Sin a - 2Cos b
8	F(x) = xx decreases in the interval	A. (0,e) B. (0.1) C. (-∞.0) D. None
9	The equation of two polynomials P(x)/Q(x) where Q(x) ≠ 0 with no common factor is called	A. 12 B. 1 C. 10 D. -10
10	If A and B are two events then P(A∪B) =? (when A and B are disjoint)	A. P(A) - P(B) B. P(A) x P(B) C. P(A) + P(B) D. P(A) + P(B) -P(A∩B)
11	$P(x) = 2x^4 -3x^3 +2x-1$ is polynomial of degree	A. 1 B. 2 C. 3 D. 4
12	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
13	$d/dx \int x^1 dx$ =_____.	A. 1/4 x⁴ B. X³ C. 3x³ D. x⁴/4
14	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

15	Tan^{-1} 1/x =_____	A. Sin x B. Sec⁻¹ X C. Cot⁻¹ X D. Sin lx/cos- lx
16	The number of ways in which we can courier 5 packets to 10 cities is	A. 2 x 5^o B. 5¹⁰ C. 10⁵ D. 2¹⁰
17	An m x n matrix is said to be rectangular if	A. Forms a group w.r.t. addition B. Non commutative group w.r.t. multiplication C. Forms a group w.r.t. multiplication D. Doesn't form a group
18	An angle of one radian is equivalent to	A. 90^o B. 60^o C. 67^o D. 57^o, 18^o
19	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
20	The number of ways in which 5 distinct toys can be distributed among 3 children is	A. 3⁵ B. 5³ C. C⁵₃ D. P⁵₃