GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	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
2	ω^n = ?, when n = 3k	A. 0 B. ω C. 1 D. 1 / ω
3	6 is	A. A prime integer B. An irrational number C. A rational number D. A odd integer
4	In the function v = 4/3 π r^3, V is a function of	A. 3/4 B. r C. v D. π
5	Sin-1 [-1/2] = _____.	A. ∏/3 B. -∏/6 C. -∏/3 D. ∏/6
6	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
7	d/dx ∫x^1 dx =_____.	A. 1/4 x⁴ B. X³ C. 3x³ D. x⁴/4
8	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)
9	ω^{88} = ?	A. A and B are multiplicative inverse of each other B. A and B are additive inverses of each other C. A and B are singular matrices D. A and B are equal
10	The number of ways in which 5 distinct toys can be distributed among 3 children is	A. 3⁵ B. 5³ C. C⁵₃ D. P⁵₃
11	A sequence of numbers whose reciprocals forms an arithmetic sequence is called	A. Harmonic series B. Arithmetic series C. Harmonic sequence D. Geometric sequence
12	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
13	The equation of the circle with center origin and radius 2√2 is	A. x² + y² = 2√2 B. x² + y² = 8 C. x² - y² = 2√2 D. x² - y² = 8
14	The end points of the major axis of the ellipse are called its	A. foci B. Vertices C. Co-vertices

		D. eccentricity
15	If any two rows (or any two columns) of a square matrix are inter changed, the determinant of the resultant matrix is	A. True B. False C. Fallacious D. Some times true
16	If i,m,n are the direction cosines of a vector $\overline{OP}$ then	A. l² + m² + n² =0 B. l² - m² + n² =1 C. l² + m² + n² =1 D. l² + m² - n² =0
17	If Sin θ =Cosθ then θ=	A. 30° B. 45° C. 60° D. 90°
18	The line joining (1,3) to (a,b) has unit gradient then	A. a-b =-2 B. a+b = 0 C. A-b =5 D. 2a + 3b =1
19	d/dx ($3y^4$) =	A. 12y³ dy/dx B. 8y³ C. 8y³ dy/dx D. 12y³
20	Any point where f is neither increasing nor decreasing and f(x) =0 at that point is called a	A. Minimum B. Maximum C. Stationary point D. Constant