GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	ω^n = ?, when n = 3k	A. 0 B. ω C. 1 D. 1 / ω
2	The range of inequality x + 2 > 4 is	A. (-1,2) B. (-2,2) C. (1,∞) D. None
3	A die is thrown what is the probability that there is a prime number on the top?	A. 1/2 B. 1/3 C. 1/6 D. 2/3
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	The associative angle of 280^o is	A. 100^o B. 10^o C. 80^o D. -80^o
6	$(x+2)^2 = x^2 +4x +4$ is	A. 1 B. 2 C. 3 D. 4
7	If $y = (ax)^m + b^m$, then dy/dx equals	A. m (ax) ^m x^{m-1} B. ma^m x^{m-1} C. m a^m x^{m-1} D. m a^m x^{m-2}
8	The nth term in G.P 3,-6,12,..... is	A. 25, 20 B. 20, 10 C. 20, 5 D. 15, 10
9	The circle $(x-2)^2 + (y + 3)^2 =4$ is not concentric with the circle	A. (x -2)² + (y + 3)² =9 B. (x +2)² + (y - 3)² =4 C. (x -2)² + (y + 3)² =8 D. (x -2)² + (y + 3)² =5
10	Tan (π + Tan^{-1} x) =?	A. Tan x B. X C. -x D. Cot⁻¹ x
11	Cse π/3	A. 2 B. 1 C. 0 D. 2/√3
12	The axis of the parabola $y^2 = 4ax$ is	A. x =0 B. Y =0 C. X = y D. X = -y
13	$1/x^2$ -1 = ? (in case of making partial fraction)	A. Ax +B/x² -1 B. A/x + B/ x- 1 C. A/ x+1 + B/x-1 D. None
		A. 0

14	If f (x) = x/x^2- 4 then which is not included in the domain of f(x)	B. -2 C. 1 D. 4
15	If the 9^{th} tern of A.P is 8 and the 4^{th} term is 20. then the first term is	A. 1 B. 2 C. -2 D. -1
16	The sum of the series 1+5+9+13+17+21+25+29 is:	A. 10 cm B. 20 cm C. 30 cm D. 40 cm
17	Period of Sin 2x =	A. π B. 4π C. 2nπ D. 2π
18	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
19	In the function v = 4/3 π r^3, V is a function of	A. 3/4 B. r C. v D. π
20	If sin θ= 3/5 Cos θ=	A. 1/2 B. 3/5 C. 4/5 D. 1