GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	6 is	A. A prime integer B. An irrational number C. A rational number D. A odd integer
2	Corola available in 5 models 8 colours and 3 sizes how many Corola must a local dealer have no hand in order to have one of each kind avialable?	A. 24 B. 120 C. 16 D. 39
3	If $x^2 + y^2 = 4$, Then dy/dx =	A. 2x +2y B. 4 -x² C. -x/y D. y/x
4	Ab > 0 and a > 0 then	A. a > b B. a < b C. a = b D. None
5	F(x) = xx decreases in the interval	A. (0,e) B. (0.1) C. (-∞.0) D. None
6	The gradient of the line joining (1,4) and (-2,5) is	A. 3/8 B. -2 2/3 C. -1/3 D. 2
7	The two different parts of the hyperbola are called is	A. Vertices B. Directrices C. Nappes D. Branches
8	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
9	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
10	In the function $v = 4/3\ \pi r^3$, V is a function of	A. 3/4 B. r C. v D. π
11	If sin θ= 3/5 Cos θ=	A. 1/2 B. 3/5 C. 4/5 D. 1
12	Domain of Cosecθ is	A. is R but θ= nπ B. is R but θ ≠ nπ C. is R but θ ≠ 2nπ D. is R but θ ≠ nπ/2
13	1+2+3+.....+n=?	A. n(n +1)/2 B. n +1/2 C. n(n +1)(2n +1)/6 D. n³
14	The set of all positive even integers is	A. Φ B. {1,2,3} C. {Φ} D. {0}
15	Given eight points in a plane no three of which are collinear how many lines do the points determine?	A. 16 B. 64 C. 28

		D. 36
16	If Z= (1,2). tjem Z^{-1} = ?	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
17	$1/x^2$ -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
18	Sin^{-1} (-x) =	A. Cos⁻¹ 1/x B. -Sin⁻¹ X C. 1/sin-1x D. Sin⁻¹ 1/x
19	Which is an explicit function	A. y = x² +2x -1 B. x² +xy +y² =2 C. xy² -y +9/xy =1 D. All are
20	Cos 315° =	A. 0.707 B. 0.5 C. 1 D. 0