GAT Subject Mathematics MCQ's Test

Sr	Questions	Answers Choice
1	How many elements are in the sample space of two rolling dies	A. 6 B. 12 C. 18 D. 36
2	A point of a solution region where two of its boundary lines intersect is called	A. Boundary B. Inequality C. Half plane D. Vertex
3	In the function v = 4/3 π r^3, V is a function of	A. 3/4 B. r C. v D. π
4	Sec^{-1} x=	A. Cos⁻¹ 1/x B. Cosec⁻¹ 1/x C. Cos-1 (-x) D. Tan⁻¹ x
5	If C^n_r, P^n_r = 24:1 then r = ?	A. 1 B. 2 C. 3 D. 4
6	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
7	The parametric equation of a curve are x = t^2, y = t^2 then	A. dy/dx =3t/2 B. dy/dx =t⁵ C. dy/dx =5t⁴ D. None
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	If a rectangle has an area 81x^2 and length of 27x. then what is its width?	A. 3x B. 9x C. 3x² D. 9x²
11	Sin^{-1} x =?	A. π/2- Sin⁻¹ x B. π/2 -Cos⁻¹ x C. -Sin⁻¹ x D. -Cos⁻¹ x
12	Which of the following is the equation of a line with slope 0 and passing through the point (4,3)	A. X =4 B. X = -4 C. Y = 3 D. Y = -6
13	The common difference of the sequence 7,4,1.....is	A. 1 B. -3 C. 5 D. 0
14	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
15	If f(x) = x^3- 2x^2 +4x-1, then f(-2) =?	A. 0 B. -25 C. 5 D. 45

16	Sin-1 [-1/2] = _____.	A. ∏/3 B. -∏/6 C. -∏/3 D. ∏/6
17	If a and b are any two distinct negative real numbers and G-ab where A.G.H represent arithmetic geometric and harmonic means then	A. 1 B. ω² C. ω D. 0
18	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
19	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
20	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