NAT I General Science Mathematics

Sr	Questions	Answers Choice
1	The average of first 100 integers is=	A. 50 1/2 B. 25 1/4 C. 100 D. 5050
2	Sin-1 (√2/2)=?	A. π/2 B. π/3 C. 3π/4 D. 2π
3	120° degrees are equal to how many radians?	A. π/3 radians B. 2π/3 radians C. π/4 radians D. π/2 radians
4	The principal value of $\sin^{-1}$ [√3/2] is	A. π/3 B. -π/3 C. 2π/3 D. 5π/3
5	In the triangle Δ ABC, where C is the right angle Tan A + Tan B=	A. A +B B. C² /AB C. A²/BC D. B²/AC
6	Multiplicative inverse of "1" is	A. 4 B. 3 C. 2 D. 1
7	Sin 720° = _____	A. 1 B. 0 C. 2 D. 1/2
8	Cos 315° =	A. 0.707 B. 0.5 C. 1 D. 0
9	If x lies in {0, 2π} and Cosec x = 2 then x =	A. π/ 6 and 5π/6 B. π +2nπ C. nπ D. 2π/3 and π/3
10	If sin θ= 3/5 Cos θ=	A. 1/2 B. 3/5 C. 4/5 D. 1
11	The associative angle of 280^{o} is	A. 100^o B. 10^o C. 80^o D. -80^o
12	The axis of the parabola $y^2 = 4ax$ is	A. x =0 B. Y =0 C. X = y D. X = -y
13	r + 3 > 5 then which is true	A. r + 2 > 4 B. r + 2 < 4 C. r + 2 + 4 D. None
14	x is a member of the set {-1,0,3,5} y is a member of the set {-2,1,2,4} which is possible?	A. x- y =-6 B. x -y < -6 C. x -y > 6 D. None
15	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

16	$Sin^{-1}\ \sqrt{3}/2$ =?	A. 2π/3 B. π/2 C. π/3 D. v/5
17	In the figure PS is perpendicular to QR, if PQ = PR 26 and P8 = 24,then QR=	A. 10 B. 20 C. 40 D. 26
18	In the function v = 4/3 π r^3, V is a function of	A. 3/4 B. r C. v D. π
19	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
20	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