Mathematics General Science Test Medium Mode

Sr	Questions	Answers Choice
1	If $\tan^{-1}3 + \tan^{-1}x = \tan^{-1}8$, then x=	A. 5 B. 1/5 C. 5/14 D. 14/5
2	The additive inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
3	Question Image	A. Reflexive property B. Symmetric property C. Transitive property D. Additive property
4	Question Image	
5	Question Image	
6	If p and q are two statements then their conjunction is denoted by	
7	Question Image	A. 15 B. 15 i C. -15 i D. -15
8	A sequence is a functions whose domain is a subset of the set of	A. Natural numbers B. Real numbers C. Whole numbers D. Rational numbers
9	Question Image	
10	For the equation $\|x^2\| + \|x\| -6 =0$, the roots are	A. One and only one real number B. Real with sum one C. Real with sum zero D. Real with product zero
11	Question Image	A. a-b=ab B. ab=a C. a+b=ab
12	In set builder notation the set {0,1,2,.....100} can be written as	A. {x / xε B ∧ x ≤ 100} B. {x / x ∈ W ∧ x < 101} C. {x / x ∈ Z ∧ x < 101} D. The set of first 100 whole numbers
13	The Domain of y = sin x is _____	A. Set of real numbers B. Rational C. Irrational no. D. None of above
14	sin5θ+sin3θ = _____;	A. 2sin 4θ cosθ B. 2cos 4θ sinθ C. 2cos 4θ cosθ D. -2sin 4θ sinθ
15	The towers each 120 meters high are 800 meters apart. The measure of the angle of elevation from the base of one tower to the top of the other is	A. 12[□] B. 9[□] C. 7[□] D. -120[□]
16	Question Image	
17	If the focus lies on the y-axis with coordinates f(0,a) and directrix of the parabola is y = -a, the equation of parabola is:	A. y² = -4 ax B. x² = 4ay C. x² = -4ay D. y² = 4ax
18	The projections of a line segment on x, y, z axes are 12, 4, 3. The length and the direction cosines of the line segment are	

19	The roots of (b-c)x2+(c-a) x+a-b=0 are equal if	A. 2b = a+c B. 2a = b+c C. 2c = a+b D. a + b + c =0
20	In common logarithm the base is	A. 1 B. 0 C. 10 D. e