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	Question Image	
3	Question Image	A. 1 B. 2 C. 0 D. 4
4	Which is not included in the domain of $\cos^{-1}x$	A. 0 B. 1 C. -1 D. 2
5	Range of cosec x is _____	A. {-1, 1} B. R C. Negative real numbers D. R - { x | - 1 < x < 1}
6	If sided of□ABC are 16,20,and 33, then the value of the greatests angle to	A. 150□ 20' B. 132□ 35' C. 101□ 25' D. 160□ 50'
7	The central angle of an arc of a circle whose length is equal to the radius of the circle is called the	A. degree B. radian C. minute D. second
8	A chord passing through the centre of the circle is called	A. the secant of the circle B. the tangent of the circle C. the arc of the circle D. the diameter of the circle
9	If (0, 0) and (1, 0) are the end points of a diameter, then the equation of the circle is	
10	The solution set of sin x + cos x = 0 is	
11	A function in which the second elements of the order pairs are distinct is called	A. Onto function B. One-one function C. Identity function D. Inverse function
12	A matrix in which the number of rows is not equal to the number of columns is called a	A. Diagonal matrix B. Rectangular matrix C. Square matrix D. Scalar matrix
13	The coordinates of a point P(x,y) referred to XY-system are	A. (x+y,y+k) B. (x-h,y-k) C. (x,y) D. (x-h,y-k)
14	The equation of a line parallel to the tangent to the circle $x^2 + y^2 = 16$ at the point (2, 3) and passing thro' the origin is	A. 2x + 3y = 0 B. 2x - 3y = 0 C. 3x + 2y = 0 D. 3x - 2y = 0
15	Which of the following is a quadrantal angle	A. 100° B. 200° C. 170° D. 270°
16	Question Image	
17	Question Image	
18	The longer side of a parallelogram is 10 cm and the shorter is 6 cm. If the longer diagonal makes an angles 30° with the longer side, the length of the longer diagonal is	
		A. x > v ⇒ xz > vz

19	∀x,y,z ∈ R and z 0,then	B. x<y ⇒ xz < yz C. x < y ⇒ xz > yz D. None of these
20	sin 3a = _____;	A. 3sin a - 4sin3a B. 4sin a -3 sin3 a C. 3 cos3 a -cosa D. 4cos3 a - 3cos a