**MTH101 Online Quiz No. 03 -Spring 2014**

1..If Sin(3x^2) / 6 + C is the anti–derivative of a function f(x), then f(x) = \_\_\_\_\_\_\_\_\_\_.  
  
x^2 Cos(3x^2).  
  
**x Cos(3x^2).  = answer**  
  
x Cos(3x).  
  
none  
  
2.Which of the following is the integral of Sin(3x+5) with respect to x ?  
  
-1/3[-Cos(3x+5)]  
  
**1/3[-Cos(3x+5)]  = answer**  
  
1/15[-Cos(3x+5)]  
  
-Cos(3x+5)  
  
3.If ‘n’ goes from 1 to 3 and the summation of ‘na’ = 6a, then the value of ‘a’ is ----------  
  
**6  = answer**  
  
-6  
  
1  
  
undetermined  
  
4.If ‘n’ goes from 1 to any large ODD number then the summation of ‘(-1)^n’ = ---------  
  
**-1  = answer**  
  
0  
  
1  
  
that specific large ODD number  
  
5.1+2+3………+t equals  
  
**n(n+1)/2  = answer**  
  
t(t+1)/2  
  
n(n+1)(2n+1)/6  
  
none  
  
6.If definite integral of f(x)=Sinx over [a,0] is equal to ‘-2’ then the value ‘a’ is---------  
  
pi/2  
  
**pi  = answer**  
  
0  
  
-pi  
  
7.If the definite integral of f(x)=3 over [1,x] is greater than ‘12’ then -----  
  
x>12  
  
x>5  
  
**x>3  = answer**  
  
x>1  
  
8.If [-8,8] is subdivided into ‘16’ equally spaced subintervals, then the RIGHT end point of 13th sub-interval will be--------.  
  
2  
  
3  
  
4  
  
**5  = answer**  
  
9.Which of the following is the integral of sin(2x)?  
  
cos(2x)+C  
  
2cos(2x)+C  
  
**–(1/2)cos(2x)+C  = answer**  
  
none  
  
10.Sum of cubes of n-terms of a series whose nth term is ‘n’ = ---  
  
Square of n(n+1)(2n+1)/6  
  
Square of n(n+1)/2  
  
**Square of (n+1)/2** **= answer**  
  
Square of n(n+1)/6



















