**MTH603 ASSIGNMENT NO 1.**

**Solution**

**Question: 1**

Find the root of an equation  taking initial value using Newton Raphson Method correct up to four decimal places.

**Solution:**



Taking derivative





By using newton Raphson method

 for n = 0,1,2,3

 Put n =0 



 



 

Now, 



Put n = 1 



 Put 



 Put 



Now , using formula 

 Put n = 2 in formula 

 

Putting the values in formula we get,

 Required root is 0.4668

**Question: 2**

Evaluateby Newton Raphson Method correct up to four decimal places.

**Solution:**  

Since 

So we take 



  



  



 by putting values

 

By putting values, we get,

Hence 