3a)
$$4(x) = 3x^2 + 5e^{-3} + 10$$

Iteration 1

Zet $x = 1$ $y = 2$ $N = 0.01$

At $x = 1$
 $\frac{df(x_1y)}{d(x)} = 6(0) = 6$

At $y = 2$
 $\frac{df(x_1y)}{d(x_1y)} = -5e^{-6x} = 0.67667641618$
 $\frac{df(x_1y)}{d(x_1y)} = -5e^{-6x} = 0.67667641618$
 $\Delta x = -(0.01)(6) = -0.06$
 $\Delta y = -(0.01)(-0.61667641618) = -0.67667647618$

Δy = - (0.01) (0.67667641618) = -0.6766764161

N= 1-0.06 =0.94

y = 2+0,67667641618 = 2.6766.7641618 = 2.007.

1000 = (WE-10) = (W. 1) 1/10

12 00 00 al

n=0.94 y=2.007.

1. ..

Ateration 2

At x = 0.9 4

de(x,y) = 6(0.94)=5.64

At y=2.007

 $\frac{df(ny)}{d(y)} = -5 * e^{-2.007} = -5(0.134) = -0.671$

(P.D) 26 (P.D) 15 7 (P) 66

318 840 - 3

J18.8 = RODR (1136)

Ax = -0.01 \$ 5.64 = -0.056

14= -0.01 - 0.0151 = 0.00671.

X=0.94-0.056=0.88.

y= 2.007+0.00671=2.014