

Appendix B

The C-Program Code

```
#include<stdio.h>
#include<conio.h>
#include <math.h>
#include<iostream.h>
void main()
{
    int    k, i, j, n, x=0, u, v, w, x1=0, u1=0, v1=0, w1=0;
double q0, q1, q2, z=0, s[5], d[5], Ck[10000], r[10000], FCk[10000],
    SCk[10000], e[10000], ne[10000], m9, T=0.005;
printf("Calculation of Equation\n");
printf("\n\n Enter the value of q0 q1 q2 ");
scanf("%lf %lf %lf",&q0,&q1,&q2);
for (n=0; n<=10000; n++)
{
Ck[n]=0;
e[n]=0;
ne[n]=0;
}
s[0]=5*q0;
s[1]=25*T*q0-10*q0+5*q1;
s[2]=-25*T*exp(-5*T)*q0+5*q0+25*T*q1-10*q1+5*q2;
s[3]=-25*T*exp(-5*T)*q1+5*q1+25*T*q2-10*q2;
s[4]=-25*T*exp(-5*T)*q2-5*q2;
d[1]=2+exp(-5*T)-25*T*q0+10*q0-5*q1;
```