NAME: SHAILJA KANT TIWARI COURSE: B.Sc(hons.)Physics ROLL NO.: 81

**SOURCE CODE:**

clc;

clear;

clf;

function **y1dox1**=f(**x1**, **y1**)

**y1dox1**=exp(-**x1**)

endfunction

x1=zeros(7,1)

y1=zeros(7,1)

x1(1)=0

y1(1)=0

h=0.1

for(i=1:7)

x1(i+1)=x1(i)+h

y1(i+1)=y1(i)+f(x1(i),y1(i))

i=i+1

end

subplot(221)

plot2d(x1,y1)

function **y2dox2**=g(**x2**, **y2**)

**y2dox2**=(**x2**)^2-(exp(-**x2**)\***y2**)

endfunction

x2=zeros(7,1)

y2=zeros(7,1)

x2(1)=0

y2(1)=0

h=0.1

for(i=1:7)

x2(i+1)=x2(i)+h

y2(i+1)=y2(i)+g(x2(i),y2(i))

i=i+1

end

disp(" x1 y1 x2 y2")

disp([x1 y1 x2 y2])

subplot(222)

plot2d(x2,y2)

**OUTPUT:**

