function jvbasha(solver)

infinity =7;

bet=3.5;sc=0.1;pr=0.1;ca=-1;lam=0.01;af=0.1;sr=0.1;

ta=0.3; lines = {'r-','g-','b-','k'};

% ta=-0.3;

solver = 'bvp4c';

bvpsolver = fcnchk(solver);

infinity = basha1;

maxinfinity = basha2;

Mva=-[1.25 1.24 1.23];

for i = 1:3

ca=Mva(i);

solinit = bvpinit(linspace(0,infinity,100),[-1.50 0 -0.3 0.0 -0.3 0 0]); lines = {'r-.','g-.','b-.'};%first sol.

%solinit = bvpinit(linspace(0,infinity,100),[-1.50 0 0.3 0.0 -0.3 0 0]); lines = {'r-.','g-.','b-.'};%second sol.

sol = bvpsolver(@fsode,@fsbc,solinit);

eta = sol.x;

f = sol.y;

figure(1)

plot(eta,f(2,:),lines{i},'linewidth',2);

xlabel ('\zeta');

ylabel ('f^I(\zeta)');

% legend(' M = n(1)',' M = Mva(2)',' M = Mva(3)','M=Mva(4)',2);

hold on

figure(3)

hold on

end

hold off

% ----------------------------------------------------------------------

%

function dfdeta = fsode(eta,f)

dfdeta = [ f(2)

f(3)

-(f(1)\*f(3)-f(2)\*f(2)+1+lam\*(f(4)))/(1+1/bet)

f(5)

-pr\*(f(1)\*f(5)-f(2)\*f(4)+af\*(-sc\*(f(1)\*f(7)-f(2)\*f(6)+sr\*(-pr\*(f(1)\*f(5)-f(2)\*f(4)+af)))))

f(7)

-sc\*(f(1)\*f(7)-f(2)\*f(6)+sr\*(-pr\*(f(1)\*f(5)-f(2)\*f(4)+af\*(-sc\*(f(1)\*f(7)-f(2)\*f(6)+sr\*(-pr\*(f(1)\*f(5)-f(2)\*f(4)+af)))))))

];

end

% ----------------------------------------------------------------------

%Boundary conditions

function res = fsbc(fa,fb)

res = [ fa(1)-0

fa(2)-ca

fa(4)-1

fa(6)-1

fb(2)-1

fb(4)

fb(6)

];

end

% ----------------------------------------------------------------------

end % fsbvp