CS3081 Assignment 3

Name: _____

Student Number: _____

Question 1 (Problem 4.26)

    (i)   (a) = 4, (b)= 7
    (ii)   (a)=2.2, (b)=7
    (iii)   (a)=4, (b)=2.2
    (iv)   (a)=7, (b)=4

Your Answer ((i)-(iv)):

Question 2 (Problem 6.13)

    (i)   420W
    (ii)   420KW
    (iii)   530W
    (iv)   580KW

Your Answer ((i)-(iv)):

Question 3 (Problem 8.7)

The truncation error is:

    (i)   O(h)
    (ii)   O(h^2)
    (iii)   O(h^3)
    (iv)   O(h^4)

Your Answer ((i)-(iv)):

Question 4 (Problem 8.9)

    (i)   f'_male(2006)=4965;
             f'_female(2006)=10681;

Predicted_Males(2008)=673601;
Error_Males=0.62%;
Predicted_Females(2008)=277990;
Error_Females=0.58%

(ii)   f'_male(2006)=4940;
        f'_female(2006)=10681;
        Predicted_Males(2008)=673601;
        Error_Males=0.62%;
        Predicted_Females(2008)=277987;
        Error_Females=0.57%

(iii)   f'_male(2006)=4940;
        f'_female(2006)=10681;
        Predicted_Males(2008)=673601;
        Error_Males=0.68%;
        Predicted_Females(2008)=277987;
        Error_Females=0.42%

(iv)   f'_male(2006)=4965;
        f'_female(2006)=10670;
        Predicted_Males(2008)=673601;
        Error_Males=0.68%;
        Predicted_Females(2008)=277987;
        Error_Females=0.52%

Your Answer ((i)-(iv)):