**Numerical Computation - Assignment 8**

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**Q1.**

We know that

, .

,

At point where which is the junction of the spline:

,

. In this question, . So, is a natural cubic spline.

Q2.

Set the natural cubic spline by:

which goes through . we have:

Then we have :

Then we have :

Because the spline is natural cubic spline, then it has :

To conclude, we know , , . And we have five function and there only 5 unknow, we can get the result:

The natural cubic spline is:

Q3.