**LECTURE ASSIGNMENT 2**

The equations for stationary string and bar problems given by the Finite Element Method on a regular spatial are

 ,

 or ,

 or .

Write the equations for the stationary string problem of grid points  shown in the figure. Tightening , cross-sectional area , and density of the material  are constants.



*L*





*g*

0

3

2

1

*P*

Name**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** Student number**\_\_\_\_\_\_\_\_\_\_\_\_\_**

At point , the displacement boundary condition applies

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At point , the equilibrium equation applies

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At point , the equilibrium equation applies

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At point , the displacement boundary condition applies

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