# SBE II: Homework 4

## Experiment-3:

Given that we know the following:

With the following boundary conditions:

We are asked to solve for the constants , and represent this solution as a function. Applying boundary conditions to the above gives us the following:

For the case at the limit of the cylinder, requires that .

This leaves us with:

And, to convert to the prescribed form by the question is then trivial:

Or, in spatial form,

Where,