Obtaining the transfer functions:

1. Write the set of unsteady-state equations that describes the process. This is called modeling.
2. Linearize the model if necessary.
3. Write the steady-state equations at the initial conditions.
4. Subtract the two sets of equations, and define the deviation variables.
5. Obtain the Laplace transform of the linear model in deviation variables.
6. Obtain the transfer functions by solving the Laplace transform explicitly for the transformed output variable(s).