A system is given by:



1. Determine its order, number of inputs/outputs.

2. Is the system controllable?

3. Write the necessary Matlab commands that will determine its observability.

4. Write the necessary Matlab commands that will determine the TF of the system.

5. Using the command dsolve, find its solution when and *u*=02x2

6. Find the numerical solution and compare it with the answer in Q5.