Section a

* 1.Choose an engineering process (A1):

✓Deposit

✓ Boiler

✓ Mixing Tank

✓ 3D printer

✓ Laser cut( this are examples )

* 2. Define a suitable set of transient, steady state and stability margins requirements (A2)
* 3. Design an appropriate controller using Matlab (A3).
* 4. Simulate the controlled system using Simulink (A4).
* 5. Explore ways to make your simulation more realistic for higher marks (A5):

✓ Delay

✓ Noise

✓ Sensor Modelling

✓ Energy demand …

Section b

1. Express an engineering system using a state space representation (B1).

2. Design a controller using pole placement (B2).

Note you will be given an example to solve