

MEEN 2210 Electromechanical Engineering Systems Spring 2011

Class Quiz #5 Class Period # 10 February 21, 2011

Name: _____ Section: _____

Point Values: Questions 1-8 are worth 10 points each; Question 9 is worth 20 points.

1. What are the two types of inputs into a plant / process?
2. What are three reasons why a plant needs a control system?
3. **T/F** A feedback controller does not take corrective action until after a disturbance has upset the plant and generated an error signal.
4. How is an open-loop control system changed to a closed-loop control system?
5. **T/F** A feedback control system can give a speed of response much faster than is capable with the plant acting alone.
6. To properly account for interconnection effects between two subsystems, one must know three component characteristics. What are they?
7. When we model chains of components by simple multiplication of their individual transfer functions, what do we assume?
8. Instability in a feedback control system results from an improper balance. What is that imbalance?
9. Verify the transfer function C/R shown for the feedback control system block diagram.

