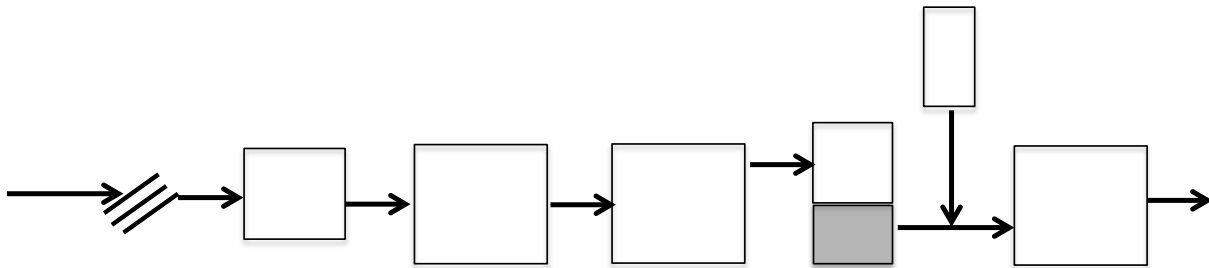


Quiz 3—Water Treatment Processes
CENG 340—Introduction to Environmental Engineering
Instructor: Deborah Sills
18 October, 2013

Name:

1. (6 points) Add labels to the following schematic of a drinking water treatment plant designed to treat surface water. Labels should describe (in one or two words) the appropriate unit process.



2. Multiple Choice: one or more answers may be correct in each of the following questions.

- (a) (2 points) The coagulation process
- i. removes particles from water
 - ii. neutralizes charged particles in water
 - iii. filters particles in water
 - iv. precipitates particles in water
 - v. requires slow mixing
 - vi. requires rapid mixing
- (b) (2 points) Alum addition results in a reaction that
- i. consumes alkalinity
 - ii. produces alkalinity
 - iii. may require addition of alkalinity
 - iv. operates best at pH between 7.7 to 9.9