

A First Course on Kinetics and Reaction Engineering

Unit 18 Additional Quiz Questions

1. Which of the following are disadvantages of batch reactors (Select all that apply)
 - a. high labor requirements
 - b. batch to batch variability
 - c. ability to change processing conditions during reaction
 - d. low throughput
 - e. design equations are differential equations
2. Which of the following does not typically lead to better process economics
 - a. using the smallest possible reactor
 - b. using long reaction runs with gradual temperature changes
 - c. operating at high conversion
 - d. operating at high selectivity
 - e. minimizing energy utilization
3. True or false? When the temperature passes through a maximum during a single adiabatic batch reaction, the reaction is endothermic.
4. When a single exothermic reaction takes place adiabatically in a batch reactor the temperature will
 - a. steadily decrease
 - b. decrease, pass through a minimum and then steadily rise
 - c. steadily increase
 - d. remain constant
 - e. increase, pass through a maximum and then steadily decline