

A First Course on Kinetics and Reaction Engineering

Unit 9 Additional Quiz Questions

1. Which of the following defines an enzyme?
 - a. a species that catalyzes a biological reaction
 - b. a species that reduces the rate of an enzyme-catalyzed reaction
 - c. a species that activates an inhibitor, making it catalytically active
 - d. a species that forms complexes
 - e. an exotic lunch meat
2. Which of the following defines a cofactor?
 - a. a species that catalyzes a biological reaction
 - b. a species that reduces the rate of an enzyme-catalyzed reaction
 - c. a species that activates an inhibitor, making it catalytically active
 - d. a species that complexes with an enzyme causing the overall catalytic activity to decrease
 - e. a species that activates an enzyme, making it catalytically active
3. Which of the following defines an inhibitor?
 - a. a species that catalyzes a biological reaction
 - b. a species that increases the conversion in an enzyme-catalyzed reaction
 - c. a species that activates a co-factor, making it catalytically active
 - d. a species that complexes with an enzyme causing the overall catalytic activity to decrease
 - e. a species that activates an enzyme, making it catalytically active
4. True or false? The concentrations of each of the different complexed forms of a homogenous catalyst are easy to measure and typically are acceptable as variables in a rate expression.
5. True or false? When an enzyme is added to a system, it is possible that some fraction of the added amount is not complexed with other species.