

1. Please describe the difference between prokaryotic and eukaryotic cells in detail. (15%)
2. When we take exercise, cells will take what kinds of strategy for providing more energy. (Hint: describe energy from glycogen) (15%)
3. Please describe the primary, secondary, tertiary and quaternary structures of a protein in detail. (15%)
4. Please describe the roles of proteins in our body. (15 %)
5. Please describe how cells obtain energy from food in detail. (20%)
6. An enzymatic reaction is represented as (20%)



The concentration of enzyme-substrate complex [ES] is assumed at steady state throughout the reaction.

Please derive an equation to express the reaction rate.