

CHAPTER 4: BIOCATALYSIS

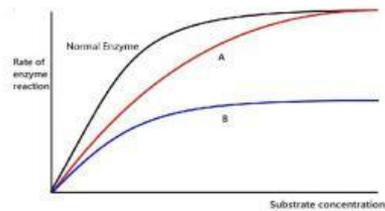
1. State all classes of enzyme according to IUBMB classification

2. State the level of protein structure that form enzyme.

3. How enzyme speed up biochemical reaction?

4. Based on your answer in 3, explain how?

5. **GRAPH 1** shows the rate on enzyme reaction based on substrate concentration.



GRAPH 1

(a) Identify type of inhibitor in A and B.

(b) Compare A and B.

6. **FIGURE 1** shows the interaction between an enzyme with particular molecules to form product.

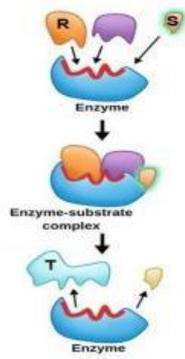


FIGURE 1

- (a) Identify R, S and T

- (b) State the types of S

- (c) Give an example for one of the types in (b)

7. **FIGURE 2** shows one of the factor that affect rate of enzyme catalysed reaction. Based on **FIGURE 2** describe mechanism of enzyme action.

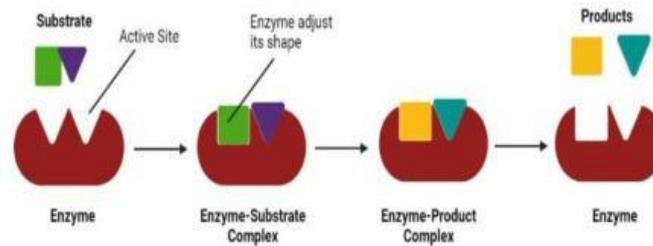


FIGURE 2

Active site is not _____ complementary with the substrate. When substrate bind to the _____ site of an enzyme, it will induce the _____ of active site to _____ slightly. Active site become _____ complementary with substrate. _____ complex formed. Catalytic reaction occurs. _____ formed and released. Active site returns to its _____ conformation.