

**2006 NATIONAL INSTITUTE OF TECHNOLOGY**  
**B.TECH III SEMESTER MID TERM EXAMINATIONS**  
**BIO CHEMISTRY**  
**(CHEMICAL ENGINEERING)**

**TIME: 2 HOUR**  
**MARK: 60**

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**Answer All The Questions**

- 1] What do you mean by Holoenzyme, apoenzyme and cofactors? Explain any two factors affect ing enzyme activity.
- 2] How is Km determined by Lineweaver-Burn double reciprocal plot method ?
- 3] Explain the salient features of active site in enzymes.
- 4] Illustrate competitive inhibition of enzyme.
- 5] Describe substrate strain theory to explain enzyme catalyzed reactions.
- 6] Write the structure of vitamin C and explain any two functions of it in the animal body.
- 7] Write structure of retinol. Explain briefly any two biological functions of retinol.
- 8] Why is vitamin E called 'a vitamin in search of a disease' ? Explain the role of it in blood clotting process.
- 9] What is TPP ? Write briefly on any two functions of it in the body.
- 10] Write the structure of FMN and FAD. Write an account on structural changes during oxidation and reduction of it.