

6. Discuss the classification of enzymes in detail with example of each class.
7. Derive Michaelis Menton equation.
8. (a) What are isozymes ? What is their importance ?  
(b) What is reversible enzyme inhibition ?

**Exam. Code : 107402**

**Subject Code : 1748**

**B.Sc. (Bio Technology) 2<sup>nd</sup> Semester**  
**BIOCHEMISTRY-II (Bioenergetics and Enzymology)**  
**Paper—BTL-153**

Time Allowed—2 Hours] [Maximum Marks—40

**Note :—** There are *eight* questions of equal marks. Candidates are required to attempt any *four* questions.

1. (a) Define metabolism. Differentiate between catabolism and anabolism.  
(b) What is free energy ? How it regulates metabolism ?
2. Discuss the characteristics of metabolic pathways in detail.
3. What are energy rich metabolites ? Discuss the structure and metabolic roles of one energy rich metabolism in detail.
4. Discuss different experimental methods for studying metabolism in detail.
5. (a) What are co-factors, co-enzymes and prosthetic groups ? Give example of each.  
(b) Discuss acid-base catalysis in detail.