

Shahjalal University of Science and Technology
Department of Biochemistry and Molecular Biology
BMB 224 Enzymology II Midterm –II
Full marks 9.0 Time 1 hr

1. What is free energy? Define the term ΔG^0 , Prosthetic group, Cofactor? 1.5
2. **Explain the following statements** 3.0
 - I. A favorable equilibrium does not mean that the substrate to product conversion will occur at a detectable rate
 - II. ATP is a biological currency and high energy molecule
 - III. Lysozyme is a bactericidal agent
3. How enzymes maintain high degree of specificity? 1.0
4. Write down the name of the enzymes and the reaction they catalyzed where FAD, NAD and PLP act as coenzyme? 1.5
5. The mechanism of action of Lysosome is mediated by covalent catalysis and general acid base catalysis, describe? 2.0