M.SC.(Biotechnology) (CBCS Pattern) Second Semester CBCS

PSBIT-105 - Enzymology Paper – I

GUG/W/18/11191 P. Pages: 1 Time: Three Hours Max. Marks: 80 Notes: 1. All questions are compulsory and carry equal marks. 1. What are enzymes? Explain the classification and nomenclature of enzyme. 16 OR a) Derive the Michaelis Menten equation. 8 Explain the model which explain the mechanism of enzyme action. 8 b) 2. Write a note on fatty acid synthase. 16 OR What is enzyme inhibition? Describe Irreversible enzyme inhibition. 8 a) Add a note on enzyme inhibition kinetics. 8 b) 3. Explain the purification and Isolation of enzymes. 16 OR a) Write a note on 8 Covalent catalysis. a) b) Metal ion catalysis. 8 4. Explain in Detail chemical modification and calmodulin mediated regulation. 16 OR Explain the types of allosteric regulation. 8 a) Comment on proteolytic activation of Enzyme with example. 8 b) 5. Write the application of enzymes in food industry. a) b) What is enzyme inhibition? Give the types of inhibitor. Write a note on membrane bound enzyme. c) d) Write note on ping-pong mechanism. *****