BSCI 420 Exam 1 – Fall 2011

Short Answers

1. Name three lysosomal enzymes. -Nucleases, Proteases, Glycosidases, Lipases, Sulfatases, Phospholipases

2. N-acetylglucosamine phosphotransferase has binding sites to UDP-GlcNAc and lysosomal hydrolase with N-linked oligosaccharide. After catalysis the final product of M-6-P linked lysosomal hydrolase is formed. What is wrong with this statement?

- N-acetylglucasome-P-m-protein phosphate still linked to GlcNAc.

3. Since the pH inside lysosome is maintained at pH 5.0, which enhances hydrolytic enzyme activities? What is the mechanism that allows the maintenance of this low acidity state?

- Proton pump
- ATPase ATP→ADP
- Energy transports H+ from cytosol \rightarrow lysosome
- 4. What are the essential amino acids?
- otesale.co.uk - Histidine, Phenylalanine, Methionine n e n ne, Leucine

5. A secretory vesicle uced at the transfer and de-coating following shortly. What events occur during D to any of this vesicle at the tage hembrane? What are the events that follow after the meeting of the vesicle membrane and the target membrane?

- Rab-effector binds to SV with Rab-GTP
- V-SNAREs of SV tangle with t-SNAREs of target membrane
- H20 is expelled between space of SV and target membrane until they meet
- Ca2+ influx at meeting point
- Fusion of 2 membranes proceeds.