



CHAPTER 4: CHEMICAL COMPOSITION OF THE CELL



Condensation Reactions

- Which of the following statements about a condensation reaction between two monosaccharides are true?
 - A sugar is produced.
 - A polysaccharide is produced.
 - A molecule of water is released.
 - A molecule of water is absorbed.
 - I and III
 - I and IV
 - II and III
 - II and IV
- How is sucrose formed?
 - By hydrolysis between glucose and fructose
 - By the condensation reaction between glucose and fructose
 - By the condensation reaction between two monosaccharides
 - By the condensation reaction between glucose and galactose
- Which of the following about maltose are true?
 - Formed from glucose
 - Formed from hydrolysis
 - Formed from glucose and galactose
 - Formed by a condensation reaction
 - I and III
 - I and IV
 - II and III
 - II and IV



Hydrolytic Reactions

4. Which of the following best describes hydrolysis?
- A The splitting of a molecule using water
 - B The breaking up of a molecule using enzymes
 - C The splitting of a molecule using light energy
 - D The splitting of a molecule by the removal of water
5. Which of the following about hydrolysis is true?
- A Molecules are rearranged
 - B Water is released as a by-product
 - C Condensed water molecules are formed
 - D Smaller molecules are formed from large ones
6. Which of the following are formed when lactose is hydrolysed?
- I Sucrose
 - II Glucose
 - III Fructose
 - IV Galactose
- A I and III
 - B I and IV
 - C II and III
 - D II and IV