

SCIT 1408: Study Guide Outline of Laboratory Modules

Lab #2

Note: This list of modules contains all the structures you are to know for lab quizzes and practical exams. It is also an excellent study guide for lecture exams.

* *Starred items are found in the text book, but not in the lab manual.*

Module 4

Vocabulary of Digestion

Ingestion

Digestion

Mechanical

Tongue

Teeth

Hard palate

Chemical

Absorption

Nutrients

Enzymatic hydrolysis

*Denaturation

Module 5

Enzymes of digestion

Mouth—Salivary amylase

*Stomach—Pepsin

Gastric lipase

*Pancreas—Trypsin, Chymotrypsin, carboxypeptidase

Pancreatic amylase

Pancreatic lipase

Pancreatic nuclease

*Small intestine—Peptidase

Sucrase, Maltase, Lactase

Intestinal lipase

Intestinal nuclease

*Know where each enzyme is produced, what it digests, and what its products are.

*Know the inactive precursors of active enzymes:

Pepsinogen/Pepsin

Trypsinogen/Trypsin

Chymotrypsinogen/Chymotrypsin

Procarboxypeptidase/Carboxypeptidase

*Know the factors affecting enzyme activity:

Temperature

pH

Time
Concentration of substrate

Module 6

Laboratory Tests for Major Organic Molecules (See supplement)

Be able to describe each test and recognize a positive and a negative test result.

Biuret Test for Protein

Lavender—positive, Blue—negative

Grease Spot Test for Lipid

Translucent spot—positive, Wet spot—negative

Benedict's Test for Reducing Sugars

Any color but blue—positive, blue—negative

Lugol's Iodine Test for Starch

Blue-black—positive, Amber—negative