

## **SBI3U: Animal Anatomy Test Review Checklist**

### **Digestive System:**

- role of digestive system
- be able to label organs
- know the 4 stages of digestion
- ingestion
  - role of teeth, saliva, tongue, epiglottis, peristalsis, amylase
- sphincters role
- digestion
  - role of stomach, hydrochloric acid, pepsin, mucus
  - role of small intestine, parts
- difference between mechanical and chemical digestion
- absorption
  - villi and microvilli (surface area) connect structure and function
  - large intestine - role and structure
- egestion
  - purpose and importance

### **Digestive System: Accessory Organs:**

- Liver
  - bile, glycogen, detoxify blood
- gallbladder
  - stores and concentrates bile
- pancreas
  - secretin - sodium bicarbonate
  - lipases, proteases, carbohydrases
  - insulin - feedback loop

### **Enzymes:**

- catalysts
- factors that influence enzyme activity
- chemical digestion of:
  - carbohydrates
  - proteins
  - fats
- summary chart

### **Respiratory System:**

- Know the pathway and function of each structure involved in respiration
  - nasal cavity, mouth, trachea, bronchi, bronchioles, alveoli, diaphragm, epiglottis, pharynx, larynx
- Define tidal volume, vital capacity, residual capacity
- Explain the process of inhalation and exhalation (the mechanics)
  - pressure changes
- Know how body responds to changes in CO<sub>2</sub> and pH

### **Circulatory System:**

- Describe the 3 types of blood vessels (relate structure to function)
  - veins
  - arteries
  - capillaries
- Know the 4 chambers of the heart
  - atria vs. ventricles - structural differences
- Know the 4 heart valves and their function
- Be able to describe the pathway that blood takes through the heart and body
  - know which areas carry deoxygenated blood and which carry oxygenated blood
- Understand some common disorders of the circulatory system such as heart attack, atherosclerosis, hypertension

### **Blood:**

- components
  - plasma
  - solids
- blood solids
  - white blood cells
  - red blood cells, hemoglobin
  - platelets
- making new blood cells