

Anatomy & Physiology (Exam 3- part B)

Study Guide for Exam III- The more detail you use in your study guide, the better your study will be. Draw diagrams and create bulleted lists as much as possible to help you organize the material. If you run short on time, be sure to cover each section at least briefly, then go back over and study in more detail (especially the concepts you are struggling with).

Cardiovascular System

1. Describe/define each of the following terms in as much detail as possible:

Composition and functions of blood

Formed elements

Erythrocytes (RBC's)

Leukocytes (WBC's)

Granulocytes

Agranulocytes

Platelets

Megakaryocytes

Composition and functions of Plasma

Hemoglobin

ABO blood groups

Pericardium

Myocardium

Epicardium

Endocardium

2. Describe the path of blood flow through the heart. Include the valves and names of the major vessels.

3. Describe how venous blood is returned to the heart

4. Describe the electrical conduction system of the heart and trace the pathway of electrical impulses through the heart.

5. Describe arteries, arterioles, veins, venules and capillaries: list their similarities, differences, locations and functions.

6. Be able to identify the structures listed in the supplement page 125-126 (except as noted)

Respiratory System

1. Describe/define each of the following in as much detail as possible:

Cellular respiration

Systemic circuit

Pulmonary circuit

Gas exchange in the lungs versus gas exchange in the tissues

Surfactant

Hemoglobin

Role of RBC's and Plasma in oxygen and carbon dioxide transport

Tidal volume

Vital capacity

2. Trace/describe/diagram the path of oxygen and carbon dioxide from the lungs to the tissues and back. Describe the mechanisms of transport (e.g. how they're carried and how they crossed membranes)

3. Be able to identify the structures listed in the supplement page 129

AS USUAL- refer to your lecture notes for anything I specifically said to study for!

Those are the likeliest to appear on the exam. Things I repeat several times are also most likely to appear on exams...