

**Review – Lab exam I BIO 139** Labs 1-4 and Case Studies Lab 5 **Lab 1**

Be able to identify WBCs on microscope and know their function

Blood Typing – You will have an example of a blood type using the trays with 3 wells. Ex: if there is a clumping only in the Rh well: What is the blood type? What antigens? What antibodies?

A WBC/RBC count of \_\_\_\_\_ cells/mm<sup>3</sup> would indicate what condition? Must know normal values.

Know all listed blood vessels in pig plus the spleen.

Know blood vessels on models. Put left or right and artery or vein with your answers

Case study page 12

**Lab 2**

Know heart model. Key in your lab manual.

Know pig heart – mainly the chambers, valves and vessels

Know which Einthoven lead we used in lab.

Where was the red lead (white lead or black lead) placed on the body?

Know the waves on a normal EKG and the abnormal EKGs listed in your lab manual.

Know the case study (abnormal EKGs) on page 23.

**Lab 3**

Be able to calculate MAP, CO, SV, EF etc. and know the correct units!

As HR increases (12, 30 very fast), what happens to Stroke Volume?

AS HR increases (12, 30, very fast), what happens to Cardiac Output?

Know how to calculate SV from the chart you used in Protocol I - “Heart as a Pump” lab.

Know the Interactive Physiology Exercise on Cardiac Output

**Lab 4**

Where are the apical and radial pulses? What is a pulse deficit? Why can't the radial be higher than the Apical?

Know the equipment used for measuring blood pressure.

Know all the Blood Pressure Terms listed in you lab manual



