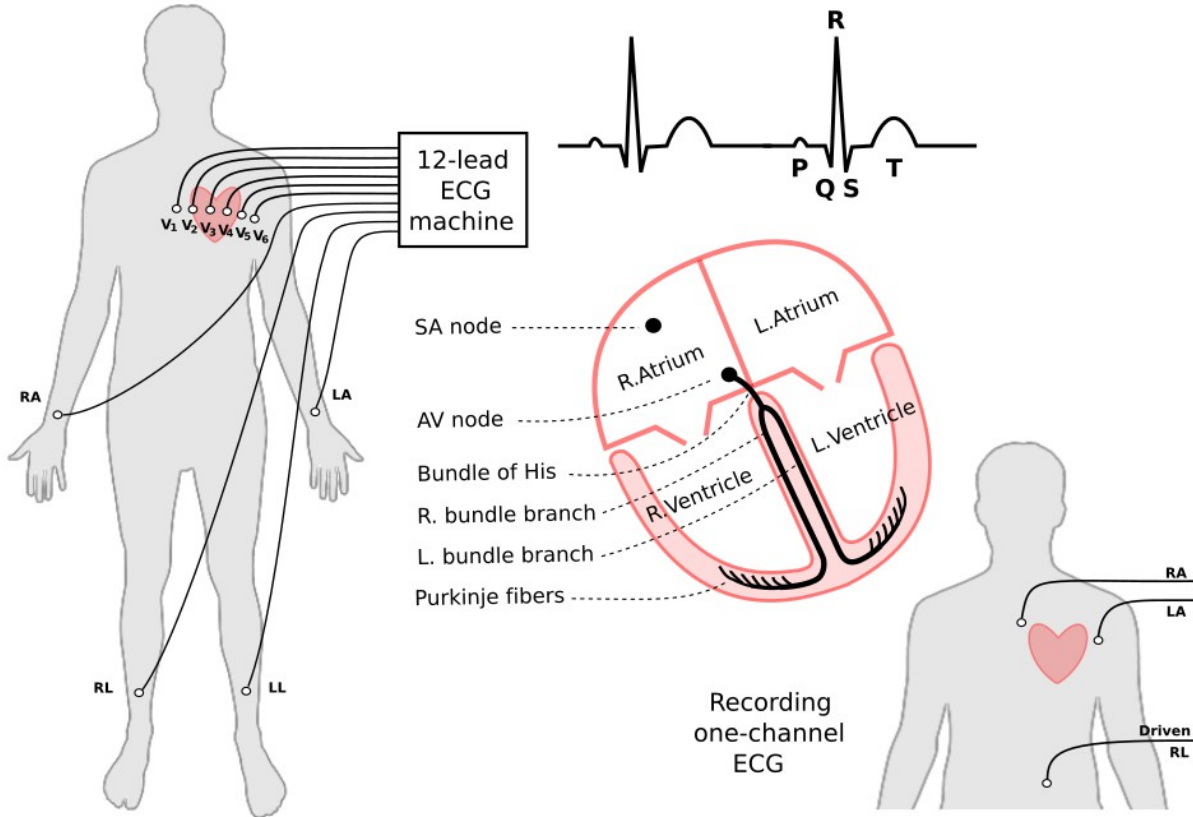


Biomedical Engineering Laboratory – Physiological Measurements

Name: _____ Date: _____

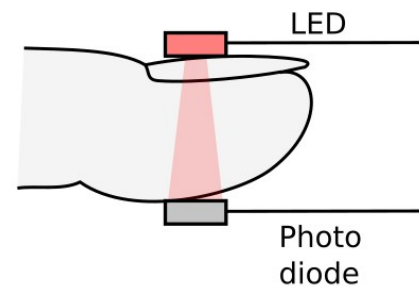
1. Electrocardiogram (ECG)

Assignment: Obtain a paper chart recording of your ECG.



2. Pulse Oximetry (SaO₂)

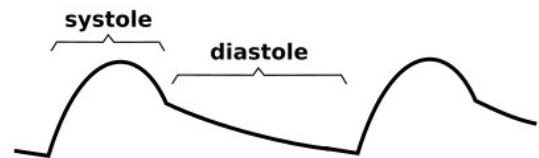
Arterial blood oxygen saturation (SaO₂) can be measured by shining LED light through a finger. Typically two lights of different wavelengths are used, a red light and an infrared light. The signal detected by the photodiode is called photoplethysmogram (PPG), which has a wave shape similar to that of the arterial pressure. The normal range of SaO₂ is between 95% and 99%.



Assignment: Measure your

SaO₂ = _____ %

Heart rate (HR) = _____ bpm



Photoplethysmogram (PPG)

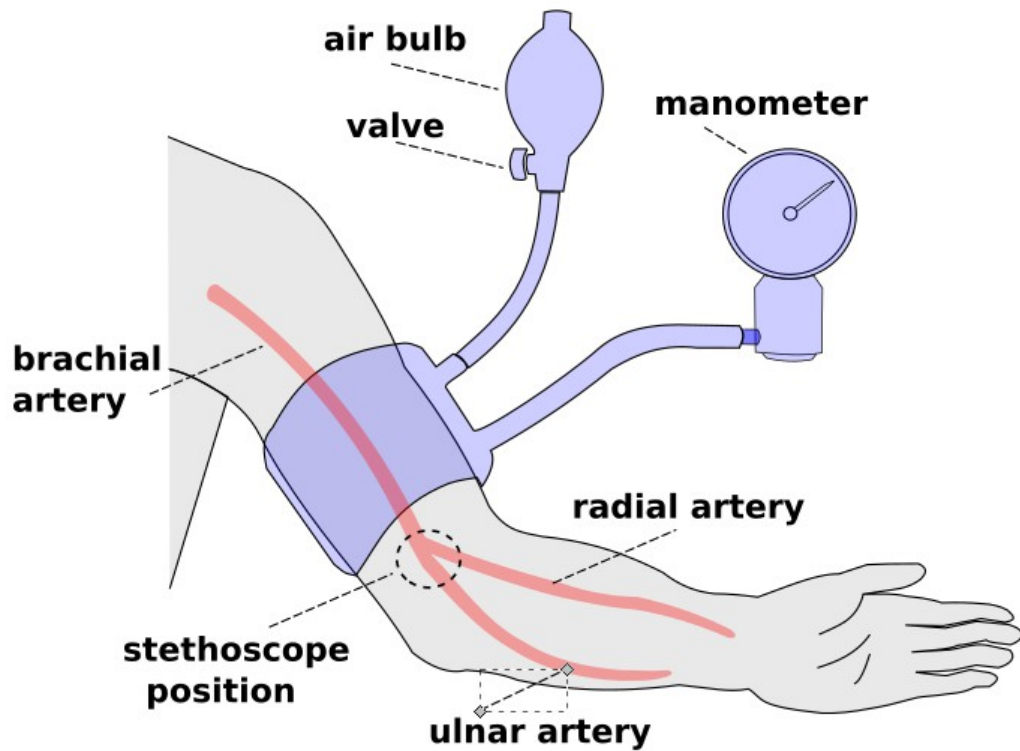
3. Blood Pressure

Assignment: Measure your

Systolic blood pressure = _____ mmHg

Diastolic blood pressure = _____ mmHg

Heart rate (HR) = _____ bpm



4. Blood Flow Velocity

Assignment: Check the artery or arteries below that you can find on yourself.

Radial artery _____

Ulnar artery _____

Brachial artery _____

Carotid artery _____

