Introduction to Anatomy and Physiology

BIOL 2404: Lab Practical 3

**Chapter 11: Blood**

Red blood Cell (Erythrocyte)

Neutrophil

Eosinophil

Basophil

Monocyte/Macrophage

Lymphocyte

Platelets (Thrombocyte)

**Chapter 12: Cardiovascular**

|  |  |  |
| --- | --- | --- |
| **Heart Layers** | **Heart Structure** |  |
| Epicardium (visceral pericardium) | Right Atrium | Left Atrium |
| Myocardium (cardiac muscle) | Right Auricle | Left Auricle |
| Papillary Muscle | Superior vena cava | Pulmonary Veins (L&R) |
| Chordae tendineae | Inferior Vena cava | Bicuspid (mitral) valve |
| Endocardium | Tricuspid valve |  |
|  | Right Ventricle | Left Ventricle |
|  | Pulmonary valve | Aorta |
| **Blood Vessel structure** | Pulmonary trunk | Aortic valve |
| Tunica externa (adventitia) | Pulmonary arteries (L&R) |  |
| Tunica media (smooth muscle) |  |  |
| Tunica intima (interna) |  |  |
|  | **ECG (electrocardiogram)** |  |
| Artery | P wave |  |
| Vein | QRS complex |  |
| Capillary | T wave |  |

**Pulse points**

Common carotid artery brachial artery

Radial artery femoral artery

Popliteal artery post. tibial artery

dorsalis pedis artery

**Major Blood Vessels - Arteries**

|  |  |
| --- | --- |
| Aorta |  |
| Brachiocephalic trunk (R) | Celiac artery |
| Common Carotid artery (R/L) | Renal artery (R/L) |
| Subclavian artery (R/L) | Common iliac artery (R/L) |
| Axillary Artery (R/L) | Internal iliac artery (R/L) |
| Brachial artery (R/L) | External iliac artery (R/L) |
| Radial artery (R/L) | Femoral artery (R/L) |
| Ulnar artery (R/L) |  |
|  |  |

**Major Blood Vessels – Veins**

|  |  |
| --- | --- |
| Superior Vena Cava | Inferior vena cava |
| Brachiocephalic vein (R/L) | Renal vein (R/L) |
| Jugular vein (R/L) | Common iliac vein (R/L) |
| Subclavian vein (R/L) | Internal iliac vein (R/L) |
| Axillary vein (R/L) | External iliac vein (R/L) |
| Brachial vein (R/L) | Femoral vein (R/L) |
| Radial vein (R/L) |  |
| Ulnar vein (R/L) |  |
|  |  |

**Chapter 14: Respiratory**

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| --- | --- |
| **Upper Respiratory Track** | **Lower Respiratory Track** |
| Nasal cavity | Trachea |
| Pharynx - nasopharynx | Primary bronchi ( L/R) |
| * oropharynx | Secondary (lobar) bronchiole |
| * laryngopharynx | Tertiary (segmental) bronchiole |
| Larynx | Lung |
| Epiglottis |  |
| Thyroid cartilage |  |
| glottis |  |
| True vocal cords |  |

**Chapter 16: Urinary**

|  |  |  |
| --- | --- | --- |
| Kidney | Ureter | Nephron |
| Renal cortex | Urinary bladder | Renal corpuscle |
| Renal medulla | Urethra | glomerulus |
| Renal pyramid | Internal urethral sphincter | Glomerular capsule |
| Renal column | External urethral sphincter | Proximal convoluted tubule |
| Minor calyx |  | Nephron loop |
| Major calyx |  | Distal convoluted tubule |
| Renal pelvis |  | Collecting duct |
| Renal hilum |  |  |