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**

|  |  |
| --- | --- |
| **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 |  |  |