Anatomical Considerations for Lab Practical I

Heart Considerations

For each of the following please be prepared to provide:

- Identify Structures
- Identify Function(s)
- Direction of Blood Flow
- Pulmonary or Systemic Circulation
- If blood is oxygenated or deoxygenated

Use your lecture notes and text to guide you in the above. Note that anatomical landmarks will have no function.

General Information

Location, Function of heart
Body system associated with the heart
Cavities associated with the heart

External Anatomy and Tissues

Apex
Base
Epicardium (Visceral Pericardium)
Myocardium
Endocardium

Posterior Interventricular Sulcus
Anterior Interventricular Sulcus
Coronary Sulcus
Atria and ventricles
Auricle

Great Vessels

Pulmonary Arteries
Pulmonary Trunk

Vena Cava
Aorta

Internal Anatomy

Interventricular Septum
Atrioventricular Orifices
Cusps
Atrioventricular valves
Tricuspid Valve
Bicuspid Valve

Aortic Semilunar Valve
Pulmonary Semilunar Valve
Pectinate Muscles
Trabeculae Carneae
Chordae Tendineae
Papillary Muscles
Blood Vessel Considerations

For each of the following please be prepared to provide:

- Name the specific vessel
- Oxygenated or Deoxygenated
- Function of the Vessel (where is the blood coming from and where is it going)
- Nutrient Rich Adjusted or Unadjusted (Hepatic Portal System only)

Always be *specific* in your preparations and answers.

*Illustration:* Hepatic Portal System will be done during “down time” during lab practical. This will be for extra credit.

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**Arterial Vasculature of Systemic Circulation Cranial To Heart**
- Ascending Aorta
- Aortic Arch
- Thoracic Aorta
- Brachiocephalic Trunk
- Left and Right Common Carotid
- Left and Right Internal Carotid Artery
- Left and Right External Carotid Artery
- Left and Right Subclavian Artery

**Venous Vasculature of Systemic Circulation Cranial To Heart**
- Superior Vena Cava
- Left and Right Brachiocephalic Veins
- Left and Right Subclavian Vein
- Left and Right Internal Jugular Vein
- Left and Right External Jugular Vein

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**Arterial Vasculature of Pulmonary Circulation Cranial To Heart**
- Pulmonary Trunk
- Left and Right Pulmonary Artery
- Left and Right Pulmonary Artery Branches
Venous Vasculature of Pulmonary Circulation Cranial To Heart
   Pulmonary Trunk
   Left and Right Pulmonary Veins
   Left and Right Pulmonary Vein Branches

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Arterial Vasculature of Abdominal and Thoracic Cavities
   Thoracic Aorta
   Abdominal Aorta
   Celiac Trunk
   Splenic Artery
   Hepatic Artery
   Gastric Artery
   Superior Mesenteric Artery
   Inferior Mesenteric Artery
   Left and Right Renal Artery
   Left and Right Gonadal Artery

Venous Vasculature of Abdominal Cavity and Thoracic Cavities
   Inferior Vena Cava
   Left and Right Renal Veins
   Splenic Vein
   Left and Right Gonadal Veins
   Superior Mesenteric Vein
   Inferior Mesenteric Vein
   Hepatic Veins

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Hepatic Portal System and Supporting Vasculature
   Superior Mesenteric Artery
   Inferior Mesenteric Artery
   Hepatic Portal Vein
   Superior Mesenteric Vein
   Inferior Mesenteric Vein
   Hepatic Veins
   Inferior Vena Cava
Arterial Vasculature Serving Lower Appendages and Pelvic Cavity
  Left and Right Common Iliac Artery
  Left and Right Internal Iliac Artery
  Left and Right External Iliac Artery
  Left and Right Femoral Artery

Venous Vasculature Serving Lower Appendages and Pelvic Cavity
  Left and Right Common Iliac Vein
  Left and Right Internal Iliac Vein
  Left and Right External Iliac Vein
  Left and Right Femoral Vein

Arterial Vasculature Serving Upper Appendages
  Left and Right Subclavian Artery
  Left and Right Axillary Artery
  Left and Right Brachial Artery

Venous Vasculature Serving Upper Appendages
  Left and Right Subclavian Vein
  Left and Right Cephalic Vein
  Left and Right Axillary Vein
  Left and Right Basilic Vein

Lymphatic Ducts
  Thoracic Duct
  Right Lymphatic Duct