Anatomical Considerations for Lab Practical I

Heart Considerations

For each of the following please be prepared to provide:

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

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)
Auricles
Posterior Interventricular Sulcus
Anterior Interventricular Sulcus
Coronary Sulcus

Great Vessels

Pulmonary Trunk
Pulmonary Arteries
Aorta
Vena Cava
Pulmonary Veins

Internal Anatomy

Endocardium
Interventricular Septum
Atrioventricular Orifices
Cusps
Atrioventricular valves
Tricuspid Valve
Myocardium
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 for In-class Exams: The Hepatic Portal System will be done during "downtime" during in-class lab practicals. This will be for extra credit.

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

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

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

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