APHY 102 Lab Exam 2 Structures and Parts

Using models, diagrams, 35 mm slides, computer graphics, specimens or microscope slides, pictures from textbook and IvyLearn; be able to identify and know the function, meaning, location of the following:

A. Blood

1. Neutrophil

2. Eosinophil

3. Basophil

4. Lymphocyte

5. Monocyte

6. Platelet (thrombocyte)

7. Red blood cell (erythrocyte)

8. Identify blood type by looking at slide for agglutination

9. Cell nucleus, cytoplasm, granules.

B. Heart

1. Apex

2. Base

3. Blood vessels

a. Superior vena cava

b. Inferior vena cava

c. Coronary sinus (vein)

d. Pulmonary trunk (artery)

e. Pulmonary artery

f. Pulmonary vein

g. Aorta (artery)

h. Right coronary artery

a. Right marginal artery

b. Posterior interventricular artery

i. Left coronary artery

a. Circumflex artery

b. Anterior interventricular artery

4. Chambers including anatomical differences between right and left ventricles.

a. Right atrium

a. Auricle

b. Fossa ovale

b. Right ventricle

c. Left atrium

a. Auricle

d. Left ventricle

5. Muscles

a. Pectinate (atria)

b. Papillary (attached to chordae tendinae)

c. Trabeculae carneae

6. Valves

a. Right atrioventricular valve (Tricuspid)

1. chordae tendinae

b. Pulmonary (semilunar) valve

c. Left atrioventricular valve (Bicuspid, mitral)

1. chordae tendinae

d. Aortic (semilunar) valve

e. Cusps

7. Septum

a. Interatrial

b. Interventricular

8. Cardiac muscle (vs. skeletal or smooth muscle)

a. Intercalated discs

b. Sarcolemma (cell membrane)

c. Gap junction

d. Sarcomere

e. T-tubule

f. Sarcoplasmic reticulum

g. Nucleus

9. Cardiac conduction system

a. Sinoatrial (SA) node (pacemaker)

b. Atrioventricular (AV) node

c. Atrioventricular (AV) bundle (bundle of His)

d. Bundle branches

e. Purkinje fibers

f. Cardiomyocyte

10. Electrocardiogram (ECG)

a. P wave

b. QRS complex

c. T wave

d. P-Q segment

e. S-T segment

f. PQ interval

g. QT interval

h. R-R interval

11. Pericardium

a. Fibrous layer

b. Parietal layer

c. Visceral layer

d. Pericardial cavity

C. Blood Vessels

1. Walls

a. Tunica intima

1. Endothelium

2. Venous valve

b. Tunica media

1. Smooth muscle

2. Elastic tissue

c. Tunica externa

1. Vasa vasorum

2. Capillary bed

a. Arteriole

b. Metarteriole

c. Precapillary sphincters

d. Thoroughfare channel

e. Venule

3. Ascending aorta

a. left coronary artery

b. right coronary artery

4. Aortic arch

a. Brachiocephalic trunk

b. Left common carotid

c. Left subclavian artery

d. Continues as thoracic aorta until passes through diaphragm

5. Arteries of head and neck

a. Internal carotid artery

b. External carotid artery

c. Vertebral artery

6. Arteries serving the brain

a. Circle of Willis

b. Basilar artery (formed by combining vertebral arteries)

7. Arteries serving the thorax and upper limbs

a. Axillary artery

b. Brachial artery

c. Radial artery

d. Ulnar artery

e. Palmar arch

8. Abdominal aorta

a. Celiac trunk

b. Superior mesenteric artery

c. Inferior mesenteric artery

d. Renal artery

e. Common iliac artery

f. Internal iliac artery

g. External iliac artery

9. Arteries serving the lower limb

a. Femoral artery

b. Popliteal artery

c. Anterior tibial artery

d. Posterior tibial artery

e. Dorsal pedis artery

10. Veins of the lower limbs

a. Femoral vein

b. Popliteal vein

c. Great saphenous vein - superficial vein

d. Small saphenous vein - superficial vein

e. Dorsal venous arch

11. Veins of the abdomen

a. Inferior vena cava

b. Hepatic portal vein

c. Renal veins

d. External iliac vein

e. Internal iliac vein

12. Veins of the head and neck

a. Superior vena cava

b. Brachiocephalic vein

c. Internal jugular vein

d. External jugular vein

13. Veins of the upper limb and thorax

a. Axillary vein

b. Brachial vein

c. Radial vein

d. Ulnar vein

e. Cephalic vein - superficial vein

f. Basilic vein - superficial vein

g. Median cubital vein - superficial vein

h. Azygos vein (right)

i. Hemiazygos vein (left)

**Heart Dissection**

Exterior of the heart: auricles, apex, base, pulmonary trunk, aorta

Longitudinal section: Tricuspid valve, Bicuspid valve, right atrium, right ventricle, left atrium, left ventricle, chordae tendinae, papillary muscle, trabeculae carne, pectinate muscle