Anatomy

-in the subclavian triangle the subclavian artery can be best described as:
*it passes through the scalene gap

-in the carotid triangle the internal carotid artery can be best identified on the basis of:
*it has no branches is the neck

-in the femoral triangle the femoral vein can be best described as:
*it receives the great saphenous vein

-the contrast dye used to visualize the anterior interventricular artery during cardiac catheterization should be injected in:
*the left posterior aortic sinus

-The conductive system of the heart is more prone to ischemic damage if:
*the right coronary artery is blocked

-In the superior mediastinum the following statement is correct:
*the brachiocephalic trunk ascends on the right side of the trachea

-longitudinal smooth muscle bundles are best seen in:
*the adventitia of the inferior vena cava

-purkinje fibers are best described as:
*show dense staining of cytoplasm using PAS reaction
In sinusoidal capillaries the following statement is correct:
*the basal lamina is absent or interrupted

-pericardium can be best described as:
*the base of fibrous layer is firmly fused to central tendon of diaphragm

-An abnormal heart sound (murmur) which is best heard over the lower part of the sternum most probably indicates:
*disease of tricuspid valve

-Foramen ovale in the fetus allows:
*passage of relatively oxygenated blood from right atrium to left atrium

-Disturbance of development of the right fourth aortic arch probably leads to:
*abnormal right subclavian artery

-In the medial malleolar region the following statement is correct:
*posterior tibial artery pulse can be felt midway between tendon of achilles and medial malleolus

Choose one incorrect statement regarding the surface markings of the cardiovascular system.

<C+>The inferior border correspond only the right ventricle

<Q>Narrowing of the arch of aorta results from abnormal development of aortic arch is:

<C+>Coarctation of aorta.
<Q> All the following are features of tetralogy of Fallot except:

<C+> Patent foramen ovale.

<Q> One of the following arteries listed on the left column is a matches with their origin listed on the right column, except

<C+> Right gastric artery : Celiac trunk

- which of the following statements is correct regarding the cardiac valves?
  * normal leaflets and cusps have scant blood vessels

- In the liver capillaries running between liver are expected to show

* Intercellular gaps

The brain is known for its blood brain barrier. How do you explain this?
Answer : endothelial cells of brain have tight junctions but no fenestration.

In an electron microscope micrograph of the heart some cardiac muscle fibers may show dense staining perinuclear granules. Why?
* Answer : these cells secrete a factor related to blood volume.

the smooth part of the adult right atrium is derived originally from:
Answer : sinus venosus.

four separate heart chambers appear on the:
Answer : 8th week

which of the following pairs is mismatched:
Answer : travels with tibial nerve : Anterior tibial artery.
which statement regarding transverse pericardial sinus is true:
Answer: it is situated between the venous and arterial ends of the heart.

which statement of the following is true:
Answer: Azygos vein is lateral to thoracic duct.

Which of the following is not associated with aortic dissection:
1-Can be distal to subclavian
2-Hypertension
3-Marfan syndrome
4-Severe atherosclerosis

Septum primum develops at
24th day
++28th day
36days
12days

Which of the following matched pairs is false:
++the largest branch of brachial artery is radial artery

Which statement regarding the pericardial sinus is false: "there were two froms so we have two answers"
++it is situated between pulmonary veins and superior vena cava
++it is much more clinically relevant than transverse pericardial sinus

The sensory nerve supply to the pericardium is from:
++a.Phrenic nerve

Regarding the heart one of the following is false:
++a.supraventricular crest separates the cavity of right ventricle from the right atrium
Regarding the venous drainage of the heart which statement is true:
+++a. Middle cardiac vein and small cardiac veins drain areas supplied by right coronary artery

Which valve of the heart is obliquely situated across two intercostal spaces:
+++a. tricuspid valve

Regarding the borders of the heart which statement is false:
+++a. The right border extends between 3rd and 6th intercostal spaces

The main artery that supplies the pericardium is:
+++a. Pericardiophrenic artery

Aschoffbodies are:
+++a. macrophages
b. neutrophils

Fibrous pericardium nerve supply?
+++a. phrenic nerve
b. vagal nerve

Which valve of the heart is composed of anterior, left and right cusps:
+++a. pulmonary valve
- In the liver, capillaries running between liver are expected to show
  Intercellular gaps

- In cardiac catheterization a catheter is introduced through the femoral artery in femoral triangle. In this regard choose the wrong statement

  The femoral vein lies lateral to the femoral artery

- In physical examination of patient with peripheral vascular disease the pulse felt on the dorsum of the foot represents Continuation of the anterior tibial artery

  <Q>Which of the following statements is FALSE concerning the right atrium:
  <C+>Sulcus terminalis is located outside at its posterior wall

  <Q>Chose one correct statements regarding the azygous vein
  <C+>Is formed by the junction of the right subcostal and right ascending lumbar veins

  <Q>The border between the atria and the ventricles is a deep groove called the _______, and the boundary between the left and right ventricles are shallower depressions called the _________.
  <C+>Coronary sulcus, interventricular sulci

  <Q>Branches of the acillary artery include all the followings except
  <C+>Continue as subclavian artery
  <C+>Cell-cell adhesion

  <Q>Blood vessels whose histological structure permits a two-way exchange of substances between blood and body cells are the:
  <C+>Capillaries
Your colleague shows you a histological slide showing a cross section through a blood vessel. Your colleague thinks it must be the femoral artery. You examine the slide and decide that he must be wrong about his diagnosis because the tunica adventitia contains several bundles of longitudinally running smooth muscle cells.

Which of the following is one of the main venous reservoirs?
Liver

1. During development, the septum primum starts to appear on the
   (i) 28th day
   (ii) 21st day
   (iii) 24th day
   Answer: 28th day

2. Which of the following structures is an important structure in the separation of the heart chambers during development?
   Answer: Endocardial Cushion

3. Which of the following arteries is the main blood supply for the pericardium?
   (i) Pericardiacophrenic artery
   (ii) Pericardial artery
(iii) Bronchial artery

Answer: Pericardiacophrenic artery

4. Which of the following represents the sensory nerve supply of the pericardium?
(i) Phrenic nerve  (ii) Vagus nerve  (iii) Sympathetic nerves

Answer: Phrenic nerve

5. Which of the following is incorrect about the oblique pericardial sinus?
(i) It is situated between the parietal and visceral pericardium
(ii) It is a blind recess
(iii) It has less surgical (clinical) importance than the transverse pericardial sinus
(iv) It is situated between the superior vena cava and the pulmonary vein
(v) It is located on the posterior aspect of the heart

Answer: (iv) It is situated between the superior vena cava and the pulmonary vein

6. Which one of the following statements is correct

Answer: the small and middle cardiac veins drain the areas supplied by the right coronary artery
7. A patient with an aortic aneurysm has decreased venous drainage (venous insufficiency) in his left arm because of the compression of a vein located antero-superiorly to the aorta. Which of the following veins are involved?

(i) Right brachiocephalic vein
(ii) Internal mammary vein
(iii) Left brachiocephalic vein

Answer: Left brachiocephalic vein

8. Which of the following statements is incorrect

(i) The largest branch from the brachial artery is the radial branch
(ii) The largest branch from the femoral artery is the profunda femoral artery

Answer: (i) The largest branch from the brachial artery is the radial branch

9. Which of the following valves lies through 2 intercostal spaces?

(i) Bicuspid valve
(ii) Tricuspid valve
(iii) Pulmonary valve
(iv) Aortic valve

Answer: Tricuspid

10. Which of the following valves has an anterior and a right and left cusp?

(i) Pulmonary valve
(ii) Bicuspid (Mitral) valve
(iii) Tricuspid valve
(iv) Aortic valve

Answer: Pulmonary valve

11. Which of the following statements is incorrect?

(i) The right border of the heart lies between the 3rd and 6th intercostal spaces

(ii) The left border of the heart lies between the 2nd and 5th intercostal spaces

(iii) The right border is convex

(iv) The most inferior point of the left ventricle is found at the 5th intercostal space

Answer: (i) The right border of the heart lies between the 3rd and 6th intercostal spaces

(ii) The left border of the heart lies between the 2nd and 5th intercostal spaces *Both are correct answers

12. Which of the following arteries supplies the AV node in most of the population?

Answer: Right Coronary artery (Posterior interventricular branch)

13. Which of the following contains a good amount of muscle fibers in the tunica adventitia (i) Muscular artery

(ii) Elastic artery
(iii) Veins

Answer: Muscular artery

14. Which of the following has valves?
(i) Large veins (ii) Medium sized veins

Answer: Medium sized veins

15. Which of the following statements is incorrect?
(i) Common carotid pulse is measured lateral to the sternocleidomastoid muscle
(ii) Superficial temporal pulse is measured anterior to the external auditory meatus
(iii) Posterior tibial pulse can be measured posterior to the middle malleolus

Answer: (i) Common carotid pulse is measured lateral to the sternocleidomastoid muscle

16. Which of the following has paired branches?
(i) Celiac artery
(ii) Hepatic artery (iii) Colic artery

Answer: (iii) Colic artery

17. Which one of the following is correct?
(i) The aorta passes over the root of the right lung
(ii) The azygos vein lies lateral to the thoracic duct

Answer: (ii) The azygos vein lies lateral to the thoracic duct
18. From what structure does the smooth surface of the right atrium develop?

(i) Bulbus Cordis

(ii) Sinus Venosus

Answer: (ii) Sinus Venosus

19. At what week has the heart developed into separated chambers?

(i) 3rd week

(ii) 4th week

(iii) 8th week

Answer: 8th week (which marks the end of the embryonic period)

20. Which of the following statements is incorrect

(i) The posterior inter-ventricular artery will determine what is known as dominance

(ii) Right coronary artery dominance means that most of the blood to the heart is supplied by the right coronary artery

(iii) The AV node is supplied by the left coronary artery in most of the times

Answer: (ii) Right coronary artery dominance means that most of the blood to the heart is supplied by the right coronary artery *(the question has 2 wrong answers)

21. Which of the following best describes the transverse pericardial sinus?

Answer: It is found between the arterial and venous ends of the heart
22. Which of the following is incorrect?

Answer: Testicular varicose is associated with abdominal veins