Name the 4 chambers in the heart and indicate whether they contain oxygenated or deoxygenated blood.

(1)_____

(2)_____

(3)_____

(4)_____

Which chambers of the heart can be viewed anteriorly?

(5)_____ and (6)_____

The pericardium of the heart is composed of 2 structures. What are they?

(7)_____ and (8)_____

The inner structure is further divided into 2 layers. (9)_____ and (10)_____, which is also the outermost layer of the heart. This layer (10) is also known as the epicardium. Between the 2 layers is a thin fluid-filled cavity called (11)_____ cavity. The fluid provides a frictionless environment for the pumping motion of the heart.

There are 2 pericardial sinuses. They are (12)_____ and (13)_____. Make sure you know their locations.

Name the 4 valves of the heart and the great vessels. Indicate the location and number of cusps for each of the valve.

(14)_____

(15)_____

(16)_____

(17)_____

What is the function of heart valves and the valves in the veins?

(18)_____

What are the structures that are attached to the edges of heart valves to prevent them from turning inside out when the ventricles contracts?

(19)_____ which are linked to wall of the ventricles through (20)_____ muscles.

The internal surfaces of the right atrium as well as both auricles are not smooth. Those rough ridges are named (21)_____.

The depression located at the interatrial (between the 2 atria) septum is named (22)_____. In fetus, this area, called _____, is open so that the atria are connected to each other. When a newborn baby takes the first breath, this area closes to prevent mixing of deoxygenated blood from the right atrium with the oxygenated blood in the left atrium.

The internal surfaces of both ventricles are rough. The irregular muscular elevations in the ventricles are named (23)_____.

Blood supply to the heart depends on the left and right coronary arteries. These arteries originate from (24)_____. The opening of these arteries are located in the left and right (25)_____ The right coronary artery gives rise to 2 arteries: (26)_____, which supplies the right border of the heart and (27)_____, which supplies the inferior surface of the heart (both ventricles) and the interventricular septum. The left coronary artery gives rise to 2 arteries named (28)_____ and (29)_____. The coronary arteries can be visualized by a technique called coronary arteriography, which is used to detect obstruction. An obstructed coronary artery will lead to myocardial infarction in which the heart muscles supplied by the obstructed artery die from loss of blood supply.

The nerves supplying the heart come from the autonomous nervous system that forms the cardiac plexus. These nerve fibers come from (30)_____ and (31)_____ nervous systems.

Name the great vessels of the heart and indicate (a) which chamber it leads to or arise from and (b) whether it contains oxygenated blood or deoxygenated blood.

(32)_____

(33)_____

(34)_____

(35)_____

(36)_____

The aortic arch gives rise to 3 arteries that supply the head and the upper limbs. Name the arteries. Which of them supplies the left upper limb?

(37)_____

Which parts of the body drain blood into the inferior vena cava?

(38)_____

Which parts of the body drain blood into the superior vena cava?

(39)_____

Which chambers of the heart has the thickest wall? (40)_____

List, from inner most to the outermost, the 3 layers in the wall of the heart. Which layer is the thickest?

(41)_____

List, from inner most to the outermost, the 3 layers of pericardium.

(42)_____

State the 2 circuits of the circulatory system and briefly describe their respective function.

(43)_____

Name the vein that drains blood from the brain to the heart. (44) _____

Which heart chamber is responsible for receiving oxygenated blood from the lungs? (45) _____

The only artery of the body that carries deoxygenated blood away from the heart is (46) _____