Cardiovascular Test

1. The atria of the heart:
   1. **Are located superiorly and receive blood from outside the heart**
   2. Are located superiorly and send blood away from the heart
   3. Are located inferiorly and receive blood from outside the heart
   4. Are located inferiorly and send blood away from the heart
2. Which of the following areas receives blood directly from the four pulmonary veins?
   1. Lungs
   2. Right atrium
   3. Right ventricle
   4. **Left atrium**
3. The bicuspid valve prevents blood from flowing from the:
   1. Right ventricle to right atrium
   2. **Left ventricle to left atrium**
   3. Left atrium to right atrium
   4. Right atrium to left atrium
4. The superior vena cava empties:
   1. Oxygenated blood into the left atrium
   2. Oxygenated blood into the right atrium
   3. Deoxygenated blood into the left atrium
   4. **Deoxygenated blood into the right atrium**
5. The pacemaker of the heart is the:
   1. **Sinoatrial (SA) node**
   2. Atrioventrciular (AV) node
   3. Bundle Branches
   4. Medulla oblongata
6. A heart rate that is slower than normal is termed:
   1. Tachycardia
   2. Fibrillation
   3. **Bradycardia**
   4. Angina pectoris
7. Which of the following is the correct patch for the transmission of an impulse in the intrinsic conduction system pf the heart?
   1. AV node, SA node, Bundle branches, Purkinje fibers,Bundle of HIs
   2. AV node, SA node, Bundle of His, Bundle branches, Purkinje fibers
   3. **SA node, AV node, Bundle of His, Bundle branches, Purkinje fibers**
   4. SA node, AV node, Bundle branches, Bundle of His, Purkinje fibers
8. Ventricular systole refers to:
   1. The aorta pumping out blood
   2. Ventricle relaxation
   3. The pulmonary trunk pumping out blood
   4. **Ventricle contraction**
9. Them “lub-dub” sounds of the heart relates to:
   1. The contraction and relaxation of the ventricles
   2. **The closing of the atrioventricular and semilunar valves**
   3. The oxygenation of the blood
   4. The pull of the chordae tendonae
10. The volume of blood pumped out by the left ventricle is referred to as:
    1. **Stroke volume**
    2. Cardiac output
    3. Heart rate
    4. Blood pressure
11. The pathway of blood flow is:
    1. Arteries, arterioles, veins, venules, capillaries
    2. Arteries, arterioles, capillaries, veins, venules
    3. **Arteries, arterioles, capillaries, venules, veins**
    4. Arteries, venules, capillaries, veins, arteries
12. Increased parasympathetic nervous system activity would result in:
    1. **A decrease in heart rate and cardiac output**
    2. An increase in heart and cardiac output
    3. High blood pressure
    4. No change
13. Cardiac output is equal to:
    1. Stroke volume divided by heart rate
    2. Heart rate divided by stroke volume
    3. Stroke volume plus heart rate
    4. **Heart rate times Stroke volume**
14. Calculate the cardiac output for someone with a 70 bpm heart rate and 70 ml/min stroke volume
    1. 49 ml/min
    2. 490 ml/min
    3. **4900 ml/min**
    4. 49000 ml/min
15. A low heart resting rate indicates:
    1. **The heart is working efficiently and does not require as much energy output to pump**
    2. The heart is working inefficiently and needs more energy to pump
    3. The heart valves are not closing completely
    4. You’re near death every time you sleep
16. Which of the following sequences is correct from outermost to innermost layer of the vessel wall?
    1. Tunica media, tunica intima, tunica externa
    2. Tunica intima, tunica media, tunica externa
    3. Tunica externa, tunica intima, tunica media
    4. **Tunica externa, tunica media, tunica intima**
17. Compared to an artery, a vein differs because:
    1. It is thicker than an artery
    2. **It is thinner than an artery**
    3. Pumps less blood than an artery
    4. Pumps more blood than an artery
18. Veins have valves because:
    1. They prevent oxygenated blood from mixing with deoxygenated blood
    2. **They prevent backflow of blood**
    3. They do not have a tunica media and cannot perform peristalsis
    4. They are more completely formed than arteries
19. Which of the following IS NOT a pressure point to take pulse?
    1. Wrist (near thumb)
    2. Side of neck
    3. **Beneath the knee**
    4. Inside of elbow
20. Which of the following would have the highest amount of blood pressure?
    1. Right ventricle
    2. **Left ventricle**
    3. Capillary in finger
    4. Pulmonary veins
21. Varicose veins are caused by:
    1. A loss of elasticity in the blood vessels
    2. Accumulation of fat around blood vessels
    3. Excessive enzyme production
    4. **Blood pooling in the legs and feet due to leaky valves**
22. Blood is considered:
    1. Epithelial tissue
    2. **Connective tissue**
    3. Adipose tissue
    4. Nonliving
23. WHich of the following is not a characteristic of blood?
    1. Opaque (you cannot see through it)
    2. Liquid
    3. **Sweet-tasting**
    4. Acidic
24. Which of the following does NOT describe plasma?
    1. COntains proteins
    2. Transports hormones
    3. pH around neutral
    4. **Colored red**
25. Which is found in the highest number in blood?
    1. **Erythrocytes**
    2. Platelets
    3. Leukocytes
    4. Metal ions
26. Which of the following does NOT describe red blood cells?
    1. They have no nucleus
    2. They are shaped like discs
    3. They contain hemoglobin
    4. **They are packed with organelles**
27. Platelets assist in:
    1. Forming blood cells
    2. Defense & immunity
    3. **Blood clotting**
    4. Hemoglobin transport
28. Blood cell formation occurs in:
    1. Blood tissue
    2. **Bone Marrow**
    3. Muscle tissue
    4. Blood vessels
29. Why is it important to replace old red blood cells?
    1. They become sickle-shaped over time
    2. **They may not be able to support as much oxygen**
    3. We need more blood as our valves lose elasticity over time
    4. Old blood cells are not red
30. WHich is the proper sequence of blood clotting (hemostasis)
    1. Platelet plug formation, coagulation, vascular spasm
    2. Coagulation, platelet plug formation, vascular spasm
    3. Vascular spasm, coagulation, platelet plug formation
    4. **Vascular spasm, platelet plug formation, coagulation**
31. Which of the following does NOT lead to clotting?
    1. Large lacerations
    2. Severe burns
    3. **Hemophilia**
    4. Physical blows (getting hit/punched)
32. Blood typically clots in:
    1. 30 seconds
    2. **3-6 minutes**
    3. 10-15 minutes
    4. An hour
33. The material synthesized to help clot an injury is:
    1. Erythrocytes
    2. **Fibin**
    3. Thrombin
    4. Serotonin
34. A clot that floats around the bloodstream is referred to as:
    1. **An embolus**
    2. Fibrin
    3. A thrombus
    4. Clotting cascade
35. The process where antibodies cause antigens to clump is known as:
    1. Hemostasis
    2. Coagulation
    3. **Agglutination**
    4. Hemolysis
36. The most common type of blood is:
    1. A
    2. B
    3. AB
    4. **O**
37. The universal recipient blood type is:
    1. A
    2. B
    3. **AB**
    4. O
38. If a father was heterozygous for B blood and the mother was heterozygous for A blood, what is the phenotypic ratio for the baby?
    1. 1:1
    2. 1:2:1
    3. 2:1
    4. **1:1:1:1**
39. In ABO blood typing, a person with B blood would:
    1. Clump when treated with anti-A serum
    2. **Clump when treated with anti-B serum**
    3. Clump when treated with anti-O serum
    4. Never clump
40. ABO blood typing tests for the presence of:
    1. **A and B antigens**
    2. A, B, and O antigens
    3. A antigens only
    4. B antigens only
41. Blood returns from the lungs via the:
    1. Pulmonary artery
    2. **Pulmonary vein**
    3. Aorta
    4. Pulmonary valve
42. Type O blood indicates all of the following except:
    1. Absence of A antigens
    2. Absence of B antigens
    3. **Absence of O antigens**
    4. Presence of A and B antibodies
43. Where does the Rh factor come from?
    1. **Evolution from Rhesus monkeys**
    2. Neanderthal DNA
    3. Genetic mutation
    4. Coagulation factors
44. If a mother is heterozygous for type B blood and a father is heterozygous for type A, what are the possible blood types of the baby?
    1. A and B
    2. A, B, and O
    3. **A, B, AB, and O**
    4. O
45. If a mother has type O blood and a father is homozygous for type A, what are the possible genotypes of the baby?
    1. IAi, IAIA
    2. IAIA
    3. ii
    4. **IAi**