Biology 4
Sample Exam Questions
Chapter 20 & 21 – Heart & Blood Vessels

Choose the best answer for each question. There is only 1 answer for each question.

1. The middle layer of the heart’s wall makes up the bulk of the tissue in the heart and is called the
   a. epicardium
   b. endocardium
   c. myocardium
   d. pericardium

2. The blood vessels that supply the wall of the heart are referred to as
   a. coronary blood vessels
   b. pulmonary blood vessels
   c. aortic blood vessels
   d. semilunar blood vessels

3. Heart sounds (lub, dup) come primarily from
   a. opening of the valves
   b. closing of the valves
   c. contraction of the atria and ventricles
   d. relaxation of the atria and ventricles

4. Which of the flowing represents the correct sequence of parts through which blood moves in passing from the vena cava to the lungs?
   a. right atrium, pulmonary semilunar valve, right ventricle, right atrioventricular valve, pulmonary trunk
   b. right atrium, right atrioventricular valve, right ventricle, pulmonary semilunar valve, pulmonary trunk
   c. right atrioventricular valve, right atrium, pulmonary semilunar valve, right ventricle, pulmonary trunk
   d. pulmonary semilunar valve, right atrium, right atrioventricular valve, right ventricle, pulmonary trunk

5. The right atrium receives blood through the
   a. superior vena cava
   b. inferior vena cava
   c. coronary sinus
   d. all of the above

6. The correct sequence of parts that function to carry cardiac impulses is
   a. A-V node, S-A node, Purkinje fibers, A-V bundle
   b. A-V node, A-V bundle, Purkinje fibers, S-A node
   c. S-A node, Purkinje fibers, A-V node, A-V bundle
   d. S-A node, A-V node, A-V bundle, Purkinje fibers
7. Starting at the superior and inferior venae cavae, in what order does a drop of blood pass through the heart structures?
   1) left ventricle
   2) right ventricle
   3) left atrium
   4) right atrium
   5) bicuspid valve
   6) tricuspid valve
   7) pulmonary arteries
   8) pulmonary veins
   9) aorta
   a. 4, 6, 2, 7, 8, 3, 5, 1, 9
   b. 1, 3, 5, 7, 9
   c. 9, 8, 7, 6, 5, 4, 3, 2, 1
   d. 3, 1, 5, 4, 6, 7, 8
   e. 7, 2, 1, 4, 5, 6, 7, 8

8. The inferior tip of the heart is the
   a. apex
   b. base
   c. coronary sinus
   d. atrial portion
   e. anterior surface

9. Prominent muscular ridges that run along the inner surface of the atrial walls are the
   a. chordae tendineae
   b. foramen ovale
   c. papillary muscles
   d. trabeculae carneae
   e. pectinate muscles

10. The atria can be distinguished from the ventricles because
    a. they have thinner more expansible muscular walls.
    b. they are larger.
    c. they are covered by large amounts of fat.
    d. they are located near the apex of the heart.
    e. no reasons; they cannot be distinguished externally.

11. Blood vessels, in correct order from the largest to the smallest are:
    1) capillaries
    2) aorta
    3) major arteries
    4) arterioles
    5) pulmonary trunk
    a. 1,2,3,4,5  b. 5,4,3,2,1  c. 2,5,3,4,1  d. 1,3,5,2 or 1  e. 5,3,2 or 4, 1
12. An artery can be distinguished from a vein by all of the following means except
   a. arterial walls are thicker than those of veins
   b. arteries have a smaller lumen than does a similar-sized vein
   c. because arterial walls are thick and strong, they retain their round shape, while
      those of veins are thinner and tend to collapse.
   d. in cross section, the lumen of a vein appears to be thrown into folds, while that of
      an artery is smooth.
   e. no exceptions; all of the above are true

13. A blood moves through the arterial system into the capillary networks and then into
    the venous system blood pressure
    a. increases
    b. remains the same
    c. decreases
    d. fluctuates up and down

14. During vasoconstriction,
    a. smooth muscle in blood vessels contracts
    b. skeletal muscle surrounding blood vessels contracts
    c. smooth muscle in blood vessels relaxes
    d. skeletal muscle surrounding vessels relaxes

15. Varicose veins can be caused by
    a. heredity
    b. prolonged standing or pregnancy
    c. aging
    d. all of the above

Answers

1. c
2. a
3. b
4. b
5. d
6. d
7. a
8. a
9. e
10. a
11. c
12. e
13. d
14. a
15. d