

# Cardiovascular system

## Cardiovascular system

*Multiple Choice.* Select the best answer and write the letter of your choice to the left of each number.

**1. The cardiovascular system includes the heart and:**

- a. lungs
- b. blood vessels
- c. digestive organs
- d. endocrine system

**2. The thick, muscular layer of the heart wall is the:**

- a. endocardium
- b. valve
- c. myocardium
- d. apex

**3. The lower chambers of the heart are the:**

- a. ventricles
- b. atria
- c. base
- d. systole

**4. A vessel that carries blood away from the heart is a(n):**

- a. vein
- b. chamber
- c. lymph node
- d. artery

**5. The tonsils, spleen, thymus, and nodes are part of the:**

- a. digestive system
- b. endocrine system
- c. epicardium
- d. lymphatic system

**6. The medical term for a “heart attack” is:**

- a. myocardial infarction
- b. cerebrovascular accident
- c. aneurysm
- d. pneumonia

**7. The accumulation of fatty deposits in the lining of a vessel is called:**

- a. obesity
- b. atherosclerosis
- c. stent
- d. angiogenesis

**8. Phlebitis is inflammation of a:**

- a. blood cell
- b. vein
- c. heart
- d. nerve

**Fill in the blanks:**

1. The word *cardiogenic* means originating in the \_\_\_\_\_
2. Interatrial means between the \_\_\_\_\_
3. Ventriculotomy means surgical incision of a(n) \_\_\_\_\_
4. A valvuloplasty is plastic repair of a(n) \_\_\_\_\_

**Write the adjective for the following definitions. The proper suffix is given for each:**

5. Pertaining to the heart (-ac) \_\_\_\_\_
6. Pertaining to the myocardium (-al; ending differs from adjective ending for the heart) \_\_\_\_\_
7. Pertaining to an atrium (-al) \_\_\_\_\_
8. Pertaining to a valve (-ar) \_\_\_\_\_
9. Pertaining to a ventricle (-ar) \_\_\_\_\_
10. Pertaining to the pericardium (-al) \_\_\_\_\_

**Following the example, write a word for the following definitions pertaining to the tissues of the heart:**

11. Inflammation of the heart's lining (usually at a valve) \_\_\_\_\_
12. Inflammation of the heart muscle \_\_\_\_\_
13. Inflammation of the fibrous sac around the heart \_\_\_\_\_

**Write a word for the following definitions:**

14. Pertaining to an atrium and a ventricle \_\_\_\_\_
15. Between the ventricles \_\_\_\_\_
16. Study of the heart \_\_\_\_\_
17. Surgical incision of a valve \_\_\_\_\_
18. Enlargement of the heart \_\_\_\_\_

# **Answers**

1. **heart**
2. **atria**
3. **ventricle**
4. **valve**
5. **cardiac**
6. **myocardial**
7. **atrial**
8. **valvular; also valvar**
9. **ventricular**

- 10. pericardial**
- 11. endocarditis**
- 12. myocarditis**
- 13. pericarditis**
- 14. atrioventricular**
- 15. interventricular**
- 16. cardiology**
- 17. valvotomy; also, valvulotomy**
- 18. cardiomegaly**

**Fill in the blanks:**

1. Vasoconstriction means narrowing of a(n) \_\_\_\_\_
2. Endarterectomy is removal of the inner lining of a(n) \_\_\_\_\_
3. Arteriolitis is inflammation of a(n) \_\_\_\_\_
4. Angioedema is localized swelling caused by changes in \_\_\_\_\_
5. Aortostenosis is narrowing of the \_\_\_\_\_
6. Phlebectasia is dilatation of a(n) \_\_\_\_\_
7. The term *microvascular* means pertaining to small \_\_\_\_\_

**Define the following words:**

8. cardiovascular \_\_\_\_\_
9. intraaortic \_\_\_\_\_
10. angiitis ; also angitis or vasculitis \_\_\_\_\_
11. arteriorrhesis \_\_\_\_\_
12. phlebitis \_\_\_\_\_

**Use the ending *-gram* to form a word for a radiograph of the following:**

13. vessels (use angi/o) \_\_\_\_\_
14. aorta \_\_\_\_\_
15. veins \_\_\_\_\_

**Use the root *angi/o* to write words with the following meanings:**

16. Formation (-genesis) of a vessel \_\_\_\_\_
17. Dilatation (-ectasis) of a vessel \_\_\_\_\_
18. Any disease (-pathy) of a vessel \_\_\_\_\_
19. Plastic repair (-plasty) of a vessel \_\_\_\_\_

Use the appropriate root to write words with the following meanings:

20. Within (intra-) a vein \_\_\_\_\_
21. Incision of an artery \_\_\_\_\_
22. Excision of a vein \_\_\_\_\_
23. Hardening (-sclerosis) of the aorta \_\_\_\_\_

## Answers

1. vessel
2. artery
3. arteriole
4. vessels
5. aorta
6. vein
7. vessels
8. pertaining to the heart and vessels
9. within the aorta
10. inflammation of a vessel or vessels
11. rupture of an artery
12. inflammation of a vein
13. angiogram
14. aortogram
15. phlebogram; venogram
16. angiogenesis
17. angiectasis ; also, hemangiectasis
18. angiopathy
19. angioplasty
20. intravenous
21. arteriotomy
22. phlebectomy ; venectomy
23. aortosclerosis

Fill in the blanks:

1. Lymphedema means swelling caused by obstruction of the flow of \_\_\_\_\_
2. Lymphadenectomy is surgical removal of a(n) \_\_\_\_\_
3. A lymphangioma is a tumor of \_\_\_\_\_
4. The adjective *splenic* means pertaining to the \_\_\_\_\_
5. Thymectomy is surgical removal of the \_\_\_\_\_
6. Tonsillopathy is any disease of the \_\_\_\_\_

**Identify and define the root in the following words:**

	<b>Root</b>	<b>Meaning of Root</b>
7. lymphangial	_____	_____
8. perisplenitis	_____	_____
9. lymphadenography	_____	_____
10. tonsillectomy	_____	_____
11. hypothymism	_____	_____

**Use the appropriate root to write words with the following meanings:**

12. Inflammation of lymphatic vessels \_\_\_\_\_
13. A tumor (-oma) of lymphatic tissue \_\_\_\_\_
14. Any disease (-pathy) of the lymph nodes \_\_\_\_\_
15. Enlargement (-megaly) of the spleen \_\_\_\_\_
16. Pertaining to (-ic) the thymus \_\_\_\_\_
17. Inflammation of a tonsil \_\_\_\_\_

## **Answers**

1. lymph
2. lymph node
3. lymphatic vessels
4. spleen
5. thymus
6. tonsils
7. lymphangi/o; lymphatic vessel
8. splen/o; spleen
9. lymphaden/o; lymph node
10. tonsill/o; tonsil
11. thym/o; thymus
12. lymphangitis also, lymphangiitis
13. lymphoma
14. lymphadenopathy
15. splenomegaly
16. thymic
17. tonsillitis

**Match the following terms and write the appropriate letter to the left of each number:**

- |                     |  |
|---------------------|--|
| 1. valve            | a. vessel that empties into the right atrium |
| 2. vena cava        | b. fibrous sac around the heart              |
| 3. apex             | c. structure that keeps fluid moving forward |
| 4. pericardium      | d. central opening of a vessel               |
| 5. lumen            | e. lower, pointed region of the heart        |
|                     |  |
| 6. thrombosis       | a. ineffective quivering of muscle           |
| 7. myocarditis      | b. formation of a blood clot in a vessel     |
| 8. infarction       | c. inflammation of the heart muscle          |
| 9. fibrillation     | d. local deficiency of blood                 |
| 10. ischemia        | e. local death of tissue                     |
|                     |  |
| 11. atherosclerosis | a. twisted and swollen vessel                |
| 12. varix           | b. blockage                                  |
| 13. occlusion       | c. absence of a heartbeat                    |
| 14. asystole        | d. localized dilatation of a vessel          |
| 15. aneurysm        | e. accumulation of fatty deposits            |
|                     |  |
| 16. VT              | a. stroke                                    |
| 17. CVA             | b. a type of blood lipid                     |
| 18. HTN             | c. rapid beat in the heart's lower chambers  |
| 19. HDL             | d. high blood pressure                       |
| 20. CABG            | e. surgery to bypass a blocked vessel        |
|                     |  |
| 21. diuretic        | a. removal of plaque                         |
| 22. regurgitation   | b. drug that increases urinary output        |
| 23. streptokinase   | c. premature contraction                     |
| 24. atherectomy     | d. drug used to dissolve blood clots         |
| 25. extrasystole    | e. backward flow                             |

**FILL IN THE BLANKS**

26. Each upper receiving chamber of the heart is a(n) \_\_\_\_\_
27. The microscopic vessels through which materials are exchanged between the blood and the tissues are the \_\_\_\_\_
28. The heart muscle is the \_\_\_\_\_
29. The largest artery is the \_\_\_\_\_
30. A sinus rhythm originates in the \_\_\_\_\_

31. Blood returning to the heart from the systemic circuit enters the chamber called the \_\_\_\_\_
32. The term *varicoid* pertains to a(n) \_\_\_\_\_
33. The lymphoid organ in the chest is the \_\_\_\_\_
34. A phlebotomist is one who drains blood from a(n) \_\_\_\_\_
35. At its termination in the abdomen, the aorta divides into the right and left \_\_\_\_\_
36. The large artery in the neck that supplies blood to the brain is the \_\_\_\_\_
37. The large vein that drains the lower body and empties into the heart is the \_\_\_\_\_
38. The right lymphatic duct and the thoracic duct drain into vessels called the \_\_\_\_\_
39. In C.L.'s case study, the device he wore to record his heart rhythm is called a(n) \_\_\_\_\_
40. The abnormal heart rhythm that prevented C.L. from completing basic training is termed \_\_\_\_\_
41. The catheterization technique used to correct C.L.'s arrhythmia is termed cardiac \_\_\_\_\_

#### TRUE–FALSE

*Examine the following statements. If the statement is true, write T in the first blank. If the statement is false, write F in the first blank and correct the statement by replacing the underlined word in the second blank.*

42. The left AV valve is the mitral valve. \_\_\_\_\_
43. The systemic circuit pumps blood to the lungs. \_\_\_\_\_
44. An artery is a vessel that carries blood back to the heart. \_\_\_\_\_
45. Diastole is the relaxation phase of the heart cycle. \_\_\_\_\_
46. The right ventricle pumps blood into the aorta. \_\_\_\_\_
47. Blood returning from the lungs to the heart enters the left atrium. \_\_\_\_\_
48. The pulmonary vein carries blood to the lungs. \_\_\_\_\_
49. The brachial artery supplies blood to the leg. \_\_\_\_\_
50. Peyer patches are in the intestine. \_\_\_\_\_
51. Bradycardia is a lower-than-average heart rate. \_\_\_\_\_
52. A beta-adrenergic blocking agent slows the heart rate. \_\_\_\_\_

#### ELIMINATIONS

*In each of the sets below, underline the word that does not fit in with the rest and explain the reason for your choice:*

53. SA node — Purkinje fibers — apex — AV node — AV bundle
54. murmur — systolic — sphygmomanometer — mm Hg — diastolic
55. U — S<sub>1</sub> — QRS — T — P
56. thymus — spleen — cusp — tonsil — Peyer patches

*Define the following terms:*

57. Avascular
58. Atriotomy

59. Splenectomy  
60. Supraventricular  
61. Phlebectomy

***Write words for the following definitions:***

62. Physician who specializes in study and treatment of the heart\_\_\_\_\_  
63. Suture of an artery\_\_\_\_\_  
64. Surgical fixation of the spleen\_\_\_\_\_  
65. An instrument (-tome) for incising a valve\_\_\_\_\_  
66. Stoppage (-stasis) of lymph flow\_\_\_\_\_  
67. Excision of a lymph node\_\_\_\_\_

***Use the root aort/o to write words with the following meanings:***

68. Downward displacement (-ptosis) of the aorta\_\_\_\_\_  
69. Narrowing (-stenosis) of the aorta\_\_\_\_\_  
70. Radiograph (-gram) of the aorta\_\_\_\_\_  
71. Before or in front of (pre-) the aorta\_\_\_\_\_

***Write the meaning of the following abbreviations as they apply to the cardiovascular system:***

82. AED\_\_\_\_\_  
83. LVAD\_\_\_\_\_  
84. DVT\_\_\_\_\_  
85. VF\_\_\_\_\_  
86. BBB\_\_\_\_\_  
87. PCTA\_\_\_\_\_

***Write words for the following definitions***

88. inflammation of a vessel\_\_\_\_\_  
89. any disease of a lymph node\_\_\_\_\_  
90. neoplasm involving the lymphatic system\_\_\_\_\_  
91. plastic repair of a vessel\_\_\_\_\_  
92. inflammation of a lymphatic vessel\_\_\_\_\_  
93. any disease of a vessel\_\_\_\_\_  
94. inflammation of a lymph node\_\_\_\_\_  
95. neoplasm of a lymph node\_\_\_\_\_  
96. tumor involving vessels\_\_\_\_\_

***Define the following words and give the meaning of the word parts in each.***

97. Phonocardiography: \_\_\_\_\_

a. phon/o \_\_\_\_\_

b. cardi/o \_\_\_\_\_

c. -graphy \_\_\_\_\_

98. Endarterectomy : \_\_\_\_\_

a. end/o \_\_\_\_\_

b. arteri/o \_\_\_\_\_

c. ecto \_\_\_\_\_

d. -tomy \_\_\_\_\_

99. Telangiectasia: \_\_\_\_\_

a. tel \_\_\_\_\_

b. angi/o \_\_\_\_\_

c. -ectasia \_\_\_\_\_

100. Lymphangiophlebitis: \_\_\_\_\_

a. lymph/o \_\_\_\_\_

b. angi/o \_\_\_\_\_

c. phleb/o \_\_\_\_\_

d. -itis \_\_\_\_\_

## Answers

1. c

2. a

3. e

4. b

5. d

6. b

7. c

8. e

9. a

10. d

11. e

12. a

13. b

14. c

15. d

16. c

17. a

18. d

19. b  
20. e  
21. b  
22. e  
23. d  
24. a  
25. c  
26. atrium  
27. capillaries  
28. myocardium  
29. aorta  
30. sinoatrial (SA) node  
31. right atrium  
32. varicose vein, varix  
33. thymus  
34. vein  
35. common iliac arteries  
36. common carotid artery  
37. inferior vena cava  
38. subclavian veins  
39. Holter monitor  
40. atrial fibrillation  
41. ablation  
42. T  
43. F; pulmonary circuit  
44. F; vein  
45. T  
46. F; left ventricle  
47. T  
48. F; heart  
49. F; arm  
50. T  
51. T  
52. T  
53. apex; The *apex* is the pointed lower region of the heart; the others are part of the heart's conduction system.

54. murmur; A *murmur* is an abnormal heart sound; the others are terms associated with blood pressure.
55. S<sub>1</sub>; S<sub>1</sub> symbolizes the first heart sound; the others are waves of the ECG.
56. cusp; A *cusp* is a flap of a heart valve; the others are lymphoid tissue.
57. without vessels
58. incision of an atrium
59. surgical removal of the spleen
60. above a ventricle
61. dilatation of a vein
62. cardiologist
63. arteriorrhaphy
64. splenopexy
65. valvotome; valvulotome
66. lymphostasis
67. lymphadenectomy
68. aortoptosis
69. aortostenosis
70. aortogram
71. preaortic
72. automated external defibrillator
73. left ventricular assist device
74. deep vein thrombosis
75. ventricular fibrillation
76. bundle branch block
77. percutaneous transluminal coronary angioplasty
78. angitis; angitis
79. lymphadenopathy
80. lymphoma
81. angioplasty
82. lymphangiitis; lymphangitis
83. angiopathy
84. lymphadenitis
85. lymphadenoma
86. angioma
87. recording of the heart's sounds
- a. sound
- b. heart

c. act of recording

98. excision of the inner layer of an artery thickened by atherosclerosis

a. within

b. artery

c. out

d. to cut

99. permanent dilation of small blood vessels causing small, local red lesions

a. end

b. vessel

c. dilation

100. inflammation of lymphatic vessels and veins

a. lymphatic system

b. vessel

c. vein

d. inflammation