1. **The most frequently transplanted organ is the:**
   a. liver.
   b. heart.
   c. kidney.
   d. pancreas.

2. **Which of the following organs may seriously be damaged in sickle cell anemia, and often subsequently leads to severe infections?**
   a. Lungs
   b. Kidneys
   c. Liver
   d. Spleen

3. ______ patients are at high risk for acquiring the inherited disorder called sickle cell anemia.
   a. Native American
   b. African American
   c. Eastern European
   d. Hispanic

4. **Which of the following medications does NOT interfere with the blood-clotting process?**
   a. Omeprazole
   b. Warfarin
   c. Heparin
   d. Clopidogrel

5. **Which of the following pathologies make patients at high risk for acute renal failure?**
   a. Polycystic kidney disease
   b. Shock
   c. Uncontrolled diabetes
   d. Hypertension

6. **Because of abnormally shaped hemoglobin, sickle cell anemia patients may occasionally experience ______, causing a blockage of small blood vessels.**
   a. sludging
   b. aggregation
   c. clotting
   d. clumping

7. **Hemodialysis is used to help the kidneys filter ______ and remove excess ______.**
   a. electrolytes; hormones
   b. urine; poisons
   c. blood; cholesterol
   d. toxins; fluids

8. **The correct terminology used for patients whose kidneys are damaged to the point where they require dialysis to survive is:**
   a. acute renal failure.
   b. end-stage renal disease.
   c. hepatic failure.
   d. terminal kidney disease.

9. **Peritoneal dialysis allows patients to dialyze at home through:**
   a. a dialysis machine.
   b. the abdomen.
   c. an AV fistula.
   d. the urethra.
10. **Two chronic medical conditions that dialysis patients frequently have in addition to kidney failure are** _______ and _______.
   a. blood clots; COPD
   b. high cholesterol; cerebral aneurysms
   c. heart failure; stroke
   d. hypertension; diabetes

11. **Dialysis patients who have missed an appointment may present with signs of __________, which is a similar presentation to __________.**
   a. pulmonary edema; congestive heart failure
   b. shortness of breath; pneumonia
   c. chest pain; acute myocardial infarction
   d. neurological disturbances; stroke

12. **A patient with renal disease who is currently on dialysis and missed an appointment may present with dangerously high levels of the electrolyte:**
   a. phosphorous.
   b. potassium.
   c. sodium.
   d. calcium.

13. **A patient with a medical history of sickle cell anemia is complaining of chest pain and shortness of breath. The patient is breathing 26 times a minute in short, shallow respirations. However, the patient's oxygen saturation via pulse oximetry is 100 percent on room air. The best approach regarding supplemental oxygen is to:**
   a. do nothing; no supplemental oxygen is necessary.
   b. place the patient on a nonrebreather mask.
   c. place the patient on a nasal cannula.
   d. place the patient on a simple face mask.

14. **You are dispatched to an unconscious hemodialysis patient. On arrival to the dialysis clinic, the patient is unresponsive, apneic, and pulseless. You secure the ABCs, begin ventilation, and initiate chest compressions. However, the patient's cardiac arrest rhythm is continuously unresponsive to defibrillations with your AED. The best approach is to:**
   a. call online medical control to terminate the code. The probability of survival is too low to continue resuscitation efforts.
   b. begin transporting and contact an ALS intercept. The patient's dysrhythmia may be related to kidney failure.
   c. run a "no-electricity" code in which compressions and ventilation are continued. No additional defibrillations are necessary.
   d. continue defibrillating as the monitor recommends. The myocardium becomes increasingly responsive to successive defibrillations.

15. **Once you encounter uncontrolled bleeding from an AV fistula, which of the following methods would you consider using to control bleeding in addition to direct pressure and elevation?**
   a. Internal wound management
   b. Tourniquet
   c. Hemostatic dressings
   d. Pressure points

16. **The sensation felt when palpating an arterial-venous fistula or shunt is known as a:**
   a. bruit.
   b. frill.
   c. thrill.
   d. fluttering.
17. The medications that transplant patients need to take for the rest of their lives to prevent organ rejection also often lead to high susceptibility of:
   a. infection.
   b. renal failure.
   c. ulcers.
   d. congestive heart failure.

18. You suspect a patient who has been having a difficult time controlling the bleeding following a small laceration to the foot may have a history of:
   a. sickle cell anemia.
   b. taking blood thinners.
   c. high blood pressure.
   d. poorly controlled diabetes.

19. You encounter a patient who has been having diffuse abdominal pain for one week. The patient has a pulse rate of 86, a blood pressure of 140/90, and a respiratory rate of 20. However, the patient appears pale, and complains of generalized weakness and shortness of breath during everyday activities. You suspect the patient is experiencing:
   a. anxiety disorder.
   b. chronic anemia.
   c. sickle cell anemia.
   d. acute anemia.

20. Why might you consider contacting medical direction before applying a tourniquet in the case of uncontrollable bleeding from an AV fistula?
   a. Damage to the fistula may occur.
   b. The patient may be in danger of losing the limb.
   c. Medical direction should be contacted before any use of tourniquets.
   d. Hemodialysis anticoagulants may make bleeding more severe.

21. Patients with a history of chronic anemia may present with which of the following signs and symptoms?
   a. Bluish discoloration of the skin and shortness of breath
   b. Yellowing of the skin and dyspnea on exertion
   c. Flushed appearance and shortness of breath
   d. Pale appearance and dyspnea on exertion

22. What is one of the most common diseases to affect the renal and urinary system?
   a. Urinary tract infections
   b. Acute renal failure
   c. End-stage renal disease
   d. Kidney stones

23. You are dispatched to a sick call. The patient was just extricated from a bathtub where he was trapped under the shower door for 2 weeks. This 72-year-old male had limited access to water from the bathtub faucet. The patient is complaining of disorientation, nausea, and vomiting. What do you think is the underlying cause for the illness?
   a. Chronic renal failure
   b. End-stage renal disease
   c. Acute renal failure
   d. Gastrointestinal infection

24. Patients who dialyze at home are at high risk for what type of infection?
   a. Peritonitis
   b. Decubitus ulcers
   c. Cellulitis
   d. Fistula infection
25. **What is a cycle of filling and draining of the abdominal cavity during peritoneal dialysis called?**
   a. Exchange
   b. Set
   c. Rotation
   d. Trade

26. **Approximately how many Americans are currently on some type of dialysis?**
   a. 200,000
   b. 50,000
   c. 100,000
   d. 350,000

27. **Approximately what percentage of United States dialysis patients treat themselves at home?**
   a. 50 percent
   b. 8 percent
   c. 25 percent
   d. 85 percent

28. **How many times a week do the majority of American hemodialysis patients receive treatment?**
   a. Five
   b. Three
   c. Seven
   d. One

29. **How long does a typical hemodialysis treatment last?**
   a. 7 to 8 hours
   b. 3 to 4 hours
   c. 1 to 2 hours
   d. 10 to 12 hours

30. **How frequently does the majority of peritoneal dialysis require treatment?**
   a. Three to five times a week
   b. Once a day
   c. Multiple treatments a day
   d. Once a week

31. **The blood has many functions critical to a patient's health. Which one of the listed items below is not a function of the blood?**
   a. Control of bleeding by clotting
   b. Delivery of oxygen to the cells
   c. Removal and delivery of other waste products to organs that provide filtration and removal, such as the kidneys and liver
   d. Removal of carbon monoxide from the cells

32. **Platelets are actually fragments of larger cells that are crucial to the formation of clots. Clumping (called aggregation) of platelets is the body's most rapid response to stop bleeding from an injured site. However, in some situations the clumping of platelets is not desirable, such as when a plaque in a coronary artery ruptures. In this situation, the rapid clumping of platelets can cause a clot that then completely blocks the coronary artery and results in a heart attack (myocardial infarction). One of the most effective and widely available drugs to prevent the aggregation of platelets is:**
   a. aspirin.
   b. plasma.
   c. hemoglobin.
   d. anemia.
33. You are dispatched to a private residence for a 52-year-old African American male sitting in his living room complaining of chest pain. During your assessment, he discloses that he has the sickle cell trait. Because of this you should:
   a. administer high-concentration oxygen.
   b. monitor for signs of inadequate respiration.
   c. be prepared to treat for shock if he also has a high fever.
   d. treat the patient as any other 52-year-old with chest pain.

34. One of the more serious diseases of the body is called renal failure. Renal failure occurs:
   a. when the adrenal glands stop working.
   b. when the kidneys fail to function as required.
   c. when the liver fails to function properly.
   d. when the pancreas stops working.

35. You are assessing your patient and preparing to take his blood pressure. You notice that he has a functioning AV fistula and you feel a vibration when you gently palpate the area. This vibration is called:
   a. a thrill.
   b. a sensation.
   c. a hemodynamic reaction.
   d. a chill.

36. There are two main types of dialysis, hemodialysis and peritoneal dialysis. The main difference between them is:
   a. hemodialysis is usually done at a special facility and peritoneal dialysis is usually done at home.
   b. hemodialysis is usually done at home and peritoneal dialysis is usually done at a special facility.
   c. hemodialysis filters the blood and peritoneal dialysis filters the urine.
   d. hemodialysis filters the urine and peritoneal dialysis filters the blood.

37. You are dispatched to a private residence for a sick person. When you arrive you are told by the patient that due to the snow storm yesterday he missed his scheduled appointment at the dialysis center and is not feeling well. Your assessment does not reveal anything remarkable outside of the fact that he has missed his dialysis. Which of the steps below would not be part of your care?
   a. Assess the ABCs.
   b. When you obtain vital signs, obtain a blood pressure on an arm that does not have a fistula.
   c. Place the patient in a supine position.
   d. Administer oxygen at 15 lpm by nonrebreather mask.

38. Of the organs that are suitable for transplant, which is the most commonly transplanted?
   a. Heart
   b. Pancreas
   c. Liver
   d. Kidneys

39. You are dispatched to a private residence for a sick person. You arrive and find a 47-year-old male patient who recently completed his peritoneal dialysis and complains of severe abdominal pain that is worsened by movement. One of the more serious complications of this type of dialysis is a bacterial infection within the peritoneal cavity. What would be the tell-tale sign that this is what is happening in this case?
   a. The patient's dialysis fluid appears cloudy when it is drained from the peritoneal cavity rather than its normal clear appearance.
   b. The patient's dialysis fluid appears clear when it is drained from the peritoneal cavity rather than its normal cloudy appearance.
   c. The patient has trouble urinating.
   d. The patient has swollen ankles.
40. **How would you define anemia?**
   a. An inherited disease in which a genetic defect in the hemoglobin results in abnormal structure of the red blood cells
   b. The loss of the kidneys' ability to filter the blood and remove toxins and excess fluid from the body
   c. The process by which toxins and excess fluid are removed from the body by a medical system independent of the kidneys
   d. A lack of a normal number of red blood cells in the circulation

41. **What is continuous ambulatory peritoneal dialysis?**
   a. A gravity exchange process for peritoneal dialysis in which a bag of dialysis fluid is raised above the level of an abdominal catheter to fill the abdominal cavity and lowered below the level of the abdominal catheter to drain the fluid out
   b. A gravity exchange process for peritoneal dialysis in which a bag of dialysis fluid is lowered below the level of an abdominal catheter to fill the abdominal cavity and raised above the level of the abdominal catheter to drain the fluid out
   c. A mechanical process for peritoneal dialysis in which a machine fills and empties the abdominal cavity of dialysis solution
   d. Dialysis performed while walking

42. **What is the purpose of the red blood cells?**
   a. They are responsible for the delivery of oxygen to the cells.
   b. They are responsible for the removal of oxygen from the cells.
   c. They are critical in response to infection and are mediators of the body's immune response.
   d. They are crucial in the formation of clots.

43. **Certain drugs are commonly referred as "blood thinners" or drugs that inhibit clotting. Which of the following would not be considered such a drug?**
   a. Coumadin® (warfarin)
   b. Lovenox® (enoxaparin)
   c. Aspirin
   d. Prilosec

44. **Which of the following abbreviations is not correct?**
   a. SCA for sickle cell anemia
   b. RBC for red blood cells
   c. WBC for white blood cells
   d. CAPD for continuous acute peripheral disease

45. **You are attending to an end-stage renal disease (ESRD) patient who has missed dialysis. Which of the following statements is most accurate?**
   a. Patients who have missed dialysis and who become unresponsive and pulseless respond very well to the use of an AED.
   b. Patients who have missed dialysis and who become unresponsive and pulseless do not respond very well to the use of an AED.
   c. Calling for ALS would not be very helpful since they cannot really do anything that an EMT cannot do in these situations.
   d. You should delay transport if necessary to wait for ALS.
Test Name: Mod 5 Renal and Blood

1. c. kidney.
2. d. Spleen
3. b. African American
4. a. Omeprazole
5. b. Shock
6. a. sludging
7. d. toxins; fluids
8. b. end-stage renal disease.
9. b. the abdomen.
10. d. hypertension; diabetes
11. a. pulmonary edema; congestive heart failure
12. b. potassium.
13. b. place the patient on a nonrebreather mask.
14. b. begin transporting and contact an ALS intercept. The patient's dysrhythmia may be related to kidney failure.
15. c. Hemostatic dressings
16. c. thrill.
17. a. infection.
18. b. taking blood thinners.
19. b. chronic anemia.
20. a. Damage to the fistula may occur.
21. d. Pale appearance and dyspnea on exertion
22. a. Urinary tract infections
23. c. Acute renal failure
24. a. Peritonitis
25. a. Exchange
26. d. 350,000
27. b. 8 percent
28. b. Three
29. b. 3 to 4 hours
30. c. Multiple treatments a day
31. d. Removal of carbon monoxide from the cells
32. a. aspirin.
33. d. treat the patient as any other 52-year-old with chest pain.
34. b. when the kidneys fail to function as required.
35. a. a thrill.
36. a. hemodialysis is usually done at a special facility and peritoneal dialysis is usually done at home.
37. c. Place the patient in a supine position.
38. d. Kidneys
39. a. The patient's dialysis fluid appears cloudy when it is drained from the peritoneal cavity rather than its normal clear appearance.
40. d. A lack of a normal number of red blood cells in the circulation
41. a. A gravity exchange process for peritoneal dialysis in which a bag of dialysis fluid is raised above the level of an abdominal catheter to fill the abdominal cavity and lowered below the level of the abdominal catheter to drain the fluid out
42. a. They are responsible for the delivery of oxygen to the cells.
43. d. Prilosec
44. d. CAPD for continuous acute peripheral disease
45. b. Patients who have missed dialysis and who become unresponsive and pulseless do not respond very well to the use of an AED.