1. **Which of the following is an action of insulin?**
   a. It increases the transfer of sugar from the stomach and small intestine to the bloodstream.
   b. It increases the movement of sugar from the bloodstream to the cell.
   c. It increases the circulating level of glucose in the blood.
   d. It blocks the uptake of sugar by the body’s cells.

2. **If the blood sugar level is very high, which of the following may result?**
   a. Excessive urination, excessive thirst, and excessive hunger
   b. Polyuria, polydipsia, polyphagia, and hyperactivity
   c. Excessive insulin, excessive glucose, and excessive urination
   d. Hyperactivity, excessive thirst, and polyuria

3. **For the reticular activating system to work correctly, what three substances are needed?**
   a. Oxygen to perfuse brain tissue, insulin to nourish brain tissue, and sodium to keep the brain hydrated
   b. Oxygen to perfuse brain tissue, insulin to nourish brain tissue, and water to keep the brain hydrated
   c. Oxygen to perfuse brain tissue, glucose to nourish brain tissue, and sodium to keep the brain hydrated
   d. Oxygen to perfuse brain tissue, glucose to nourish brain tissue, and water to keep the brain hydrated

4. **The condition in which there is an insufficient amount of sugar in the blood is called:**
   a. diabetic coma.
   b. hypoglycemia.
   c. hyperglycemia.
   d. diabetic ketoacidosis.

5. **Which of the following may result in hypoglycemia in the diabetic patient?**
   a. Failure to take insulin or oral diabetes medications
   b. Lack of exercise
   c. Vomiting after eating a meal
   d. Overeating

6. **During your primary assessment you find your patient has an altered mental status. This could indicate which of the following?**
   a. Failing respiratory system
   b. Problems with the RAS due to hypertension
   c. The need for suctioning of the airway
   d. The need to complete a secondary assessment

7. **Your patient is a 25-year-old female with a history of diabetes. She is confused, agitated, and verbally abusive to you, and she is very sweaty. Although she refuses to give a history of the present illness, you should suspect which of the following as the likely cause of the patient’s presentation?**
   a. Failure to take her insulin
   b. A nondiabetic-related problem, such as a head injury or mental illness
   c. Failure to intake sufficient sugar
   d. Excessive intake of foods high in sugar, such as soda or candy

8. **Your patient is a 44-year-old male with a history of diabetes. He is lying on the living room floor, unresponsive to all stimuli. He has a respiratory rate of 12 breaths per minute, heart rate of 112 beats per minute, and is pale and sweaty. Which of the following should you do to treat this patient?**
   a. Encourage the patient's family to administer his insulin.
   b. Apply oral glucose solution to a tongue depressor and insert it between the patient's cheek and gums.
   c. Place the patient in the recovery position to protect the airway and place oral glucose solution under the patient's tongue.
   d. Place the patient in the recovery position, administer oxygen, and monitor his airway status.
9. A hormone called insulin is secreted by the:
   a. Islets of Langerhans in the liver.
   b. Gallbladder found in the pancreas.
   c. Islets of Langerhans in the pancreas.
   d. None of the above

10. Compared to hypoglycemia, which of the following is true of hyperglycemia?
    a. Its onset is more sudden.
    b. Its onset is more gradual.
    c. Its onset is preceded by an aura, such as hallucinations or detecting unusual odors.
    d. It is more easily treated in the prehospital environment than hypoglycemia.

11. Which of the following conditions may be mimicked by hypoglycemia?
    a. Intoxication
    b. Respiratory distress
    c. Heart attack
    d. All of the above

12. Which of the following blood glucose levels is considered normal for an adult?
    a. 80 mg/dL
    b. 40 mg/dL
    c. 180 mg/dL
    d. 150 mg/dL

13. A 14-year-old female is found unconscious in the bathroom just before lunch. Several girls say they saw her shoot up earlier in the day and the school resource officer has found a syringe in her backpack. The patient has cool and clammy skin, snoring respirations, and she vomited before she slumped to the floor. What might be the cause of her altered mental status?
    a. Fainting spell
    b. Hypoglycemia
    c. Hypotension due to pregnancy
    d. Injectable illegal drugs

14. Which of the following is the most common cause of seizures in adults?
    a. Failure to take prescribed medication
    b. Withdrawal from alcohol
    c. Fever
    d. Head trauma

15. What is epilepsy?
    a. A condition in which a person has multiple seizures usually controlled by medication.
    b. A condition in which a person has an aura followed by seizure usually controlled by medication.
    c. A condition caused by congenital brain abnormalities that causes seizures only twice a year.
    d. A condition in which a person has general seizures that start in childhood.

16. There are two types of seizures; if your patient is having a seizure that affects only one body part and does not cause her to lose consciousness, it is called a:
    a. Tonic-clonic seizure.
    b. Generalized seizure.
    c. Postictal seizure.
    d. Partial seizure.
17. Your patient is a 19-year-old female who is 7 months pregnant. She has just experienced a seizure, although she has no previous history of seizures other than hypertension associated with the pregnancy. Which of the following is the most likely cause of the seizure?
   a. Trauma
   b. Hypoglycemia
   c. Eclampsia
   d. Any of the above

18. Your patient is waking up from a seizure; it was the patient's first seizure ever. When you ask what happened, the patient tells you she had the smell of fresh mown grass just before she seized. We call this sensation a(n):
   a. tonic phase.
   b. postictal phase.
   c. clonic phase.
   d. aura.

19. Which of the following is the LEAST important question in obtaining the history of a seizure patient in the prehospital setting?
   a. How did the patient behave during the seizure?
   b. Did the patient lose control of his bladder?
   c. Does the patient have a family history of seizures?
   d. What was the patient doing before the seizure?

20. You respond to a 32-year-old female who is having a seizure. You arrive on the scene to find the patient drowsy, confused, and complaining of a headache. This patient is demonstrating the:
   a. aura phase.
   b. clonic phase.
   c. postictal phase.
   d. tonic phase.

21. A seizure that occurs spontaneously from an unknown cause is called:
   a. toxicin.
   b. hypoxic.
   c. idiopathic.
   d. hypoglycemic.

22. Your patient is a 21-year-old female with a history of epilepsy. She is having a convulsion upon your arrival. Which of the following should you do?
   a. Insert a bite block, cloth, wallet, or similar item between the patient's teeth to prevent her from biting her tongue.
   b. Move furniture and other objects away from the patient to prevent injury.
   c. Restrain the patient's extremities to prevent injury from flailing of the arms and legs.
   d. Place a tongue depressor or spoon in the back of the mouth to prevent the patient from swallowing her tongue.

23. Which of the following BEST describes status epilepticus?
   a. A seizure involving convulsions on only one side of the body
   b. A seizure that occurs without a known cause
   c. A period of drowsiness following tonic-clonic seizures
   d. Two or more seizures with tonic-clonic activity without an intervening period of consciousness

24. Which of the following is LEAST important for the patient who has stopped seizing before the EMT’s arrival at the scene?
   a. Checking for mechanism of injury
   b. Requesting advanced life support
   c. Suctioning
   d. Administering oxygen
25. **The death of brain tissue due to deprivation of oxygen because of a blocked or ruptured artery in the brain is known as which of the following?**
   a. Transient ischemic attack
   b. Stroke
   c. Aphasia
   d. Seizure

26. **Which of the following is the cause of most strokes?**
   a. A spasm in an artery supplying part of the brain
   b. A ruptured cerebral artery due to an aneurysm
   c. A ruptured cerebral artery due to hypertension
   d. Blockage of an artery supplying part of the brain

27. **Which of the following is one of the most common characteristics of a stroke?**
   a. Weakness on one side of the body
   b. Projectile vomiting
   c. Sudden onset of bizarre behavior
   d. Sudden, severe headache

28. **Which of the following refers to difficulty in speaking or understanding speech as a result of a stroke?**
   a. Hemiparesis
   b. Ischemia
   c. Ataxia
   d. Aphasia

29. **Your patient is a 70-year-old man whose wife called EMS because her husband began exhibiting unusual behavior. Upon your arrival you introduce yourself to the patient, who responds, "Not until nine o'clock." This phenomenon is BEST described as:**
   a. receptive aphasia.
   b. disorientation to time.
   c. unresponsive to verbal stimuli.
   d. expressive aphasia.

30. **You have arrived on the scene of a call for a possible stroke. On your arrival, the patient denies signs and symptoms, is alert and oriented, and moves all extremities well. Her husband states that before you arrived the patient could not move her right arm and the left side of her face seemed to be "slack." Which of the following has most likely occurred?**
   a. The patient suffered a cerebral vascular accident.
   b. The patient is suffering from aphasia.
   c. The patient has had a subarachnoid hemorrhage.
   d. The patient suffered a transient ischemic attack.

31. **The signs and symptoms of a transient ischemic attack may last up to:**
   a. 1 hour.
   b. 30 minutes.
   c. 24 hours.
   d. 6 hours.

32. **Which of the following is a standardized test to evaluate a conscious patient for possible stroke?**
   a. Michigan TIA Assessment
   b. The Numbness-Aphasia-Paralysis (NAP) Test
   c. Cincinnati Prehospital Stroke Scale
   d. The Functional Analysis Stroke Test
33. **When assessing a patient for a possible stroke, which of the following three functions should be tested by the EMT?**
   a. Memory, ability to speak, and ability to track movement with the eyes
   b. Ability to walk, control of facial muscles, and balance
   c. Control of facial muscles, ability to speak, and ability to hold both arms in an extended position for 10 seconds
   d. Ability to walk, ability to hold both arms in an extended position for 10 seconds, and ability to name common objects

34. **Which of the following is NOT a common sign or symptom of stroke?**
   a. Chest pain
   b. Vomiting
   c. Sudden impairment of vision
   d. Seizure

35. **Your patient is a 59-year-old female with a sudden onset of slurred speech and weakness on her right side. Which of the following measures is appropriate?**
   a. Test the patient's sensation with a series of pinpricks, beginning at the feet and working upward.
   b. Keep the patient in a supine position.
   c. Immediately transport the patient to a hospital with specialized treatment for stroke patients.
   d. Administer oral glucose and then assess the patient's blood sugar.

36. **Which of the following is the correct position of transport for a stroke patient with left-sided paralysis, a decreased level of consciousness, and an inability to maintain his or her airway?**
   a. Supine
   b. Lying on the right side
   c. Semi-sitting
   d. Lying on the left side

37. **Your patient is an unresponsive 30-year-old male wearing a Medic-Alert bracelet indicating that he is a diabetic. The patient's coworkers came by his house to check on him when he did not show up for work and did not call in sick. Your assessment does not clearly indicate to you whether the patient may be hypoglycemic or hyperglycemic. As you are completing your assessment, the patient's sister arrives at the scene. Which of the following should you do next?**
   a. Apply oxygen and begin transport without taking further action.
   b. Use your glucometer to check his blood sugar level.
   c. Use the patient's glucometer to check his blood sugar level.
   d. Administer oral glucose, as it will not cause additional harm in hyperglycemia, but may prevent brain damage if the patient is hypoglycemic.

38. **Which of the following is characteristic of a patient with hyperglycemia?**
   a. Use of excessive amounts of insulin or lack of adequate food intake
   b. Flushed, hot, dry skin and a "fruity" odor of the breath
   c. Cool, moist skin, agitated behavior, and increased heart rate
   d. Sudden onset of altered mental status

39. **For the EMT, which of the following is the most important question to ask of a diabetic patient or his family members?**
   a. When was the last time you had something to eat?
   b. Do you have a fruity taste in your mouth?
   c. Do you have a family history of diabetes?
   d. What kind of insulin do you take?
40. **Which of the following is within the EMT's scope of practice for the treatment of the diabetic patient?**
   a. Assisting the patient with the administration of his insulin
   b. Administration of oral glucose
   c. Rectal administration of glucose
   d. Both A and B

41. **Which of the following would be an acceptable substitute for the administration of commercially prepared oral glucose solution?**
   a. Having the patient drink a glass of milk
   b. Diet soda
   c. Having the patient eat something high in protein, such as a deli sandwich
   d. Cake icing

42. **Which of the following is the role of glucose in the body?**
   a. It assists the pancreas in the manufacture of insulin.
   b. It provides energy for brain cells and other cells in the body.
   c. It allows the body to use insulin.
   d. It is an essential building block for body tissues, such as muscle and bone.

43. **Which of the following is a typical cause of seizures in children 6 months to 3 years of age?**
   a. Administration of glucose to a hyperglycemic patient
   b. Fever
   c. Asthma
   d. Chest pain

44. **A patient who demonstrates any one of the three symptoms from the Cincinnati Prehospital Stroke Scale has a ______ percent chance of having an acute stroke.**
   a. 50
   b. 60
   c. 70
   d. 80

45. **Which of the following is the most important intervention the EMT can provide to the patient having a stroke?**
   a. Assisting with administration of the patient's nitroglycerin tablets
   b. Conducting a detailed neurological exam
   c. Giving oral glucose to the patient
   d. Avoiding delay in transporting to the hospital

46. **Which of the following is the most critical piece of equipment to have immediately available for the seizure patient who has just stopped convulsing?**
   a. Suction
   b. A cervical collar
   c. A glucometer
   d. A bite block

47. **What are the three items that make up the Cincinnati Prehospital Stroke Scale?**
   a. Ask the patient to smile, hold his arms out straight in front of him with his eyes closed, and ask him to say the alphabet backward.
   b. Ask the patient to look up, hold his arms straight out by his side with his eyes closed, and ask him to repeat a sentence to see if he can remember it.
   c. Ask the patient to smile, tilt his head back with his eyes closed, and ask him to say a sentence such as, "The sky is blue in Cincinnati." to see if he can say Cincinnati.
   d. Ask the patient to smile, hold his arms straight out in front of him with his eyes closed, and ask him to say a sentence to see if it is clear.
48. **The medical term for fainting is:**
   a. syncope.
   b. altered RAS status.
   c. dehydration.
   d. vertigo.

49. **With advances in clot-busting (thrombolytic) drugs, the patient has a window of ______ hours to receive treatment.**
   a. 6
   b. 4
   c. 5
   d. 3

50. **Normal consciousness is regulated by a series of neurologic circuits in the brain that comprise the reticular activating system (RAS). The RAS has simple requirements to function properly. Which one of the items below is not one of those requirements?**
   a. Oxygen
   b. Glucose
   c. Water
   d. Blood

51. **The most common medical emergency for the diabetic is hypoglycemia, or low blood sugar. Which one of the factors below is not a cause of hypoglycemia?**
   a. Takes too much insulin
   b. Reduces sugar intake by eating too much
   c. Overexercises or overexerts himself
   d. Vomits a meal

52. **When someone is experiencing hypoglycemia, the body attempts to compensate by using the fight-or-flight mechanism of the autonomic nervous system. Which one of the statements below is not one of the fight-or-flight responses?**
   b. The heart pumps faster.
   c. Breathing accelerates.
   d. The skin is hot and dry.

53. **Most of the diabetic emergencies that you will be called to deal with will be related to hypoglycemia. However, occasionally you will experience an instance of hyperglycemia. In the list below, which item is not likely to be a sign or symptom of hyperglycemia?**
   a. Chronic thirst
   b. Excessive urination
   c. A reduced rate of breathing
   d. Nausea

54. **Many diabetics today have an insulin pump. Which of the following statements about insulin pumps is not true?**
   a. They are about the size of an MP3 player or a pager.
   b. They are usually worn on the belt.
   c. They have a catheter that enters into the abdomen.
   d. They are usually worn around the ankle.

55. **Which of the following is not a sign of a hypoglycemic diabetic emergency?**
   a. Combativeness
   b. Slow heart rate
   c. Anxiety
   d. Cold, clammy skin
56. **Looking at the list below, which of the items does not correctly compare the signs and symptoms of hypoglycemia and hyperglycemia?**
   a. Hyperglycemia usually has a slower onset than hypoglycemia.
   b. Hyperglycemic patients often have warm, red, dry skin, whereas hypoglycemic patients have cold, pale, moist, or clammy skin.
   c. The hyperglycemic patient often has acetone breath, whereas the hypoglycemic patient does not.
   d. The hypoglycemic patient is usually complaining of a headache, whereas the hyperglycemic patient is not.

57. **Which statement below is not true about seizures?**
   a. A partial seizure affects one part, or one side, of the brain.
   b. A generalized seizure affects the entire brain.
   c. The most common seizure that EMTs are likely to be called on is a tonic-clonic seizure.
   d. Many seizures are followed by an aura.

58. **There are many causes of seizures in adults. Some of them are listed below. Of those listed, what is the most common?**
   a. Failure to take prescribed antiseizure medication
   b. Hypoxia
   c. Stroke
   d. Hypoglycemia

59. **Treatment of someone with a seizure disorder includes all of the following except**
   a. place the patient on the floor or ground.
   b. loosen restrictive clothing.
   c. place a bite block in the patient's mouth so he does not bite his tongue.
   d. remove objects that might harm the patient.

60. **Something that is idiopathic:**
   a. occurs spontaneously, with an unknown cause.
   b. occurs only on psychopathic patients that have learning issues.
   c. has at least four reasons for occurring.
   d. is so simple that anyone can figure it out.

61. **Status epilepticus is a condition when:**
   a. the patient has two or more convulsive seizures lasting 2 to 3 minutes or more without regaining full consciousness.
   b. the patient has two or more convulsive seizures lasting 5 to 10 minutes or more without regaining full consciousness.
   c. the patient has three or more convulsive seizures lasting 5 to 10 minutes or more without regaining full consciousness.
   d. the patient has two or more convulsive seizures lasting 5 to 10 minutes or more but regains full consciousness between them.

62. **Which of the items below is not part of the Cincinnati Stroke Test?**
   a. Test for equal grip strength.
   b. Ask the patient to smile.
   c. Have the patient repeat a simple sentence.
   d. Test the patient for arm droop or lack of movement.

63. **Many stroke patients are candidates for thrombolytic drugs. One of the most important things that an EMT can do to optimize the care of a stroke patient who is a candidate for the drugs is:**
   a. determine the exact time of onset of symptoms.
   b. transport the patient to a Level I Trauma Center.
   c. do a thorough physical exam of the patient.
   d. transport to the closest hospital since the patient must go to the operating room as soon as possible.
As an EMT, you will be called on frequently to treat diabetic emergencies. Diabetic emergencies are usually caused by:

a. poor management of the patient's diabetes.
b. falls.
c. hypoxia.
d. pancreatitis.
Test Name: Mod. 6 Diabetic ALOC

1. b. It increases the movement of sugar from the bloodstream to the cell.
2. a. Excessive urination, excessive thirst, and excessive hunger.
3. d. Oxygen to perfuse brain tissue, glucose to nourish brain tissue, and water to keep the brain hydrated.
4. b. hypoglycemia.
5. c. Vomiting after eating a meal.
6. a. Failing respiratory system.
7. c. Failure to intake sufficient sugar.
8. d. Place the patient in the recovery position, administer oxygen, and monitor his airway status.
10. b. Its onset is more gradual.
11. a. Intoxication.
12. a. 80 mg/dL.
13. b. Hypoglycemia.
14. a. Failure to take prescribed medication.
15. a. A condition in which a person has multiple seizures usually controlled by medication.
16. d. partial seizure.
17. c. Eclampsia.
18. d. aura.
19. c. Does the patient have a family history of seizures?
20. c. postictal phase.
21. c. idiopathic.
22. b. Move furniture and other objects away from the patient to prevent injury.
23. d. Two or more seizures with tonic-clonic activity without an intervening period of consciousness.
24. b. Requesting advanced life support.
25. b. Stroke.
27. a. Weakness on one side of the body.
29. a. receptive aphasia.
30. d. The patient suffered a transient ischemic attack.
31. c. 24 hours.
32. c. Cincinnati Prehospital Stroke Scale.
33. c. Control of facial muscles, ability to speak, and ability to hold both arms in an extended position for 10 seconds.
34. a. Chest pain.
35. c. Immediately transport the patient to a hospital with specialized treatment for stroke patients.
36. d. Lying on the left side.
37. a. Apply oxygen and begin transport without taking further action.
38. b. Flushed, hot, dry skin and a "fruity" odor of the breath.
39. a. When was the last time you had something to eat?
40. b. Administration of oral glucose.
41. d. Cake icing.
42. b. It provides energy for brain cells and other cells in the body.
43. b. Fever.
44. c. 70.
45. d. Avoiding delay in transporting to the hospital.
46. a. Suction.
47. d. Ask the patient to smile, hold his arms straight out in front of him with his eyes closed, and ask him to say a sentence to see if it is clear.
48. a. syncope.
49. d. 3.
51. b. Reduces sugar intake by eating too much.
52. d. The skin is hot and dry.
53. c. A reduced rate of breathing.
54.  d. They are usually worn around the ankle.
55.  b. Slow heart rate
56.  d. The hypoglycemic patient is usually complaining of a headache, whereas the hyperglycemic patient is not.
57.  d. Many seizures are followed by an aura.
58.  a. Failure to take prescribed antiseizure medication
59.  c. place a bite block in the patient's mouth so he does not bite his tongue.
60.  a. occurs spontaneously, with an unknown cause.
61.  a. the patient has two or more convulsive seizures lasting 2 to 3 minutes or more without regaining full consciousness.
62.  a. Test for equal grip strength.
63.  a. determine the exact time of onset of symptoms.
64.  a. poor management of the patient's diabetes.