Select the best answer for each of the following questions.

1. Which of the following items would help differentiate the patient in diabetic ketoacidosis (DKA) from hyperosmolar hyperglycemic non-ketotic coma (HHNC)?
   A. HHNC presents with dehydration while DKA does not.
   B. HHNC presents with a fruity ketone odor while DKA does not.
   C. DKA presents with Kussmaul’s respirations while HHNC does not.
   D. Insulin-dependent diabetic patients generally develop HHNC as opposed to DKA.

2. You are assessing a 74-year-old confused female patient in respiratory distress. Your primary survey indicates a patent airway, labored respirations, and strong radial pulses. The skin is warm and diaphoretic with a capillary refill time less than 2 seconds. Her vital signs are: P 108, BP 110/62, and R 32. Auscultation of the lungs reveals rales and rhonchi in the left lower lobe. Which of the following is the most likely cause of respiratory distress?
   A. Pneumonia
   B. Pneumothorax
   C. Cardiogenic shock
   D. Right ventricular failure

3. Healthcare providers are responding to a possible drowning at a local lake. The patient is experiencing uncontrollable shivering and complains of nausea and weakness. The patient had been treading water for 25 minutes and now presents with tachycardia and rapid respirations. Core body temperature is 93.2°F (34°C). Which diagnosis is most likely?
   A. Mild hypothermia
   B. Acute pulmonary edema
   C. Severe hypothermia
   D. Deep frostbite

4. A 22-year-old female presents with a headache that has been present for 2 days. On assessing the patient, you note fever, diaphoresis and nausea, accompanied by neck stiffness. You suspect:
   A. Evolving stroke
   B. Meningitis
   C. Subdural hematoma from previous fall
   D. Tension headache from muscular tightness in the neck

5. Of the following statements, which is true concerning the treatment of chest pain?
   A. Cardiac chest pain only occurs in people older than 50 years.
   B. All chest pain is treatable with nitroglycerin.
   C. Chest pain should be treated as a serious condition until proven otherwise.
   D. The EMS provider must identify the specific cause prior to beginning any treatment.
6. You are called to an apartment for chest pain patient. On arrival, a 52-year-old male states that he is now pain free. Which of the following would lead you to suspect the presence of angina pectoris (ischemia) instead of an acute myocardial infarction
   A. The pain is described as sharp and stabbing.
   B. The pain has lasted between 30 and 45 minutes.
   C. The pain was promptly alleviated by rest and nitroglycerin.
   D. The pain is described as a tearing sensation that radiates to the back.

7. A 56-year-old male complains of abdominal pain and diarrhea for 7 days but refuses transport to a local hospital. On the basis of the patient’s history, your best advice for the patient would be:
   A. Decline treatment, as diarrhea is virtually harmless.
   B. Accept medical treatment, as diarrhea can alter electrolyte balances.
   C. Decline treatment, as the diarrhea will stop once a full meal is ingested.
   D. Accept medical treatment, as diarrhea is a natural response to excessive body fluids.

8. A 46-year-old male patient complains of steady, dull pain in the right upper quadrant and similar pain in the right shoulder. The patient denies any recent trauma. You suspect which of the following?
   A. The shoulder pain is referred from the liver.
   B. The shoulder pain is referred from the spleen.
   C. The shoulder pain is referred from the pancreas.
   D. The patient must have slept on his right shoulder.

9. Which of the following statements is true regarding oxygen administration?
   A. Bag-valve-mask devices deliver oxygen at 100%
   B. Nasal cannulas can effectively provide oxygen at 24–50%
   C. Nonrebreathing face masks with reservoirs deliver 100% oxygen
   D. A simple face mask delivers up to 40% oxygen at 15 L/M

10. You arrive on the scene for a 21-year-old who has had a seizure and find the patient lying on a bed. The patient responds to painful stimuli with a moan and exhibits snoring respirations. Family members inform you that his only medical problem is a history of seizures and that he only had one today. The blood glucose level is 94. The patient’s current status would best be described as:
    A. Sleeping
    B. Postictal
    C. Hypoglycemic
    D. Status epilepticus
11. The patient presents with a history of headache, weight loss, chest discomfort, night sweats, and a persistent blood-tinged cough for several weeks. Which infectious disease is most likely present?
   A. H1N1 influenza
   B. Meningococcal meningitis
   C. Tuberculosis
   D. Malaria

12. You are presented with a patient complaining of bilateral upper quadrant abdominal pain. Further assessment reveals a distended abdomen, global bruising, and jaundice to the sclera. You would suspect which of the following?
   A. Liver failure
   B. Splenic rupture
   C. Hypoactive pancreas
   D. Large-bowel obstruction

13. Which of the following signs and symptoms are indicators of neurologic dysfunction?
   A. Pulsus paradoxus
   B. Dysarthria
   C. Diaphoresis
   D. Steady gait

14. A 62-year-old male with a history of emphysema states a sudden onset of respiratory distress accompanied by pleuritic chest pain. He appears dyspneic, with a respiratory rate of 26/min. His skin is warm and nondiaphoretic. On auscultation, you note that breath sounds are diminished in the right side. Your suspicion is:
   A. Asthma
   B. Pneumonia
   C. Pneumothorax
   D. Chronic bronchitis

15. An elderly syncopal female takes aspirin daily as prescribed for coronary artery disease. She states the presence of a gradually worsening headache over the past 2 weeks. Additionally, she states intermittent problems in walking and speaking, both new to her. During the history, she states she fell in church 3 weeks ago and hit her head. The hospital stated that she had no injuries. She exhibits no immediate life threats. You would suspect which of the following?
   A. Acute CVA
   B. Epidural hematoma
   C. Subdural hematoma
   D. Cerebral concussion
16. Which of the following is the most clinically significant difference between a simple pneumothorax and a tension pneumothorax?
   A. Signs and symptoms of shock
   B. Pleuritic chest pain
   C. Respiratory distress
   D. Diminished breath sounds on one side

17. A 63-year-old male with a cardiac history presents with lethargy and confusion. The patient states he has chest pain and feels sweaty. His vital signs are: P 40, BP 84/palpation, R 28 and labored. Auscultation of the lungs reveals crackles in the lower lobes. Which of the following conditions is most likely responsible for the patient’s confusion?
   A. Pneumonia
   B. Hypovolemia
   C. Cardiac condition
   D. Emphysema or bronchitis

18. Which of the following describes the overriding goal in the formation of a differential diagnosis for abdominal pain?
   A. Identify the specific organ(s) affected.
   B. Differentiate acute life threats from non-life threats.
   C. Differentiate the specific etiology of the abdominal pain.
   D. Differentiate hemorrhage from inflammation from obstruction.

19. You suspect that a weak, confused patient is suffering from undiagnosed diabetes. Which of the following signs or symptoms would best serve to confirm you suspicion?
   A. Poor skin turgor with tenting
   B. Recent decrease in appetite
   C. Increased thirst and urination
   D. Unexplained bruising of the abdomen

20. You are assisting your ALS partner with a patient presenting with a diagnosed hemorrhage of the large intestine. You are providing oxygen and IV fluids. The patient presents with the following vital signs: P 104, BP 106/62, R 20. Which of the following would best indicate that your management of the patient is effective?
   A. Increased respirations to 24/min
   B. Decrease in blood pressure to 86/40 mm Hg
   C. Decrease in pulse rate to 76 beats/min
   D. Increase in pulse rate to 120 beats/min
21. You are transporting a 24-year-old female who is complaining of sharp chest pain that had a sudden onset. She has rapid respirations and is tachycardic. She has a history of an emergency appendectomy 3 days ago. Which of the following would you most suspect?
   A. Angina pectoris
   B. Myocardial infarction
   C. Pulmonary embolism
   D. Esophageal disruption

22. As you conduct your primary survey on an unconscious patient, you observe shallow respirations at 6/min. You should immediately do which of the following?
   A. Check for carotid and radial pulses
   B. Investigate the reason for the shallow respirations
   C. Administer positive pressure ventilation with a bag-valve-mask device
   D. Identify the specific cause of the respiratory distress

23. The most objective way to form a field impression when the patient is unconscious and there is no one to provide information is to:
   A. Evaluate the scene using visual, olfactory, and tactile observations.
   B. Attempt to contact close friends or family members.
   C. Perform thorough physical examinations, and evaluation of vital signs.
   D. Disregard this information in the pre-hospital setting. It is best obtained in-hospital by medical staff.

24. Your initial assessment of an unconscious 70-year-old male patient reveals an abnormal respiratory pattern. The breathing pattern is crescendo-decrescendo-apnea, and it repeats itself. This unusual (pathological) respiratory pattern may indicate which of the following?
   A. Diabetic ketoacidosis
   B. Hypovolemic shock
   C. Respiratory
   D. Neurologic

25. When palpating the abdomen, a patient with abdominal pain states tenderness when you press on the left lower quadrant. Which of the following conditions may be responsible for the abdominal pain and tenderness?
   A. Gastritis
   B. Hepatitis
   C. Pancreatitis
   D. Diverticulitis

26. Which of the following is the least likely cause of seizures?
   A. Chronic obstructive pulmonary disease
   B. Alcoholism
   C. Hypoglycemia
   D. Traumatic injury to the head
27. A 62-year-old male complains of an acute onset of tearing pain between the shoulder blades. The patient denies any shortness of breath, and appears anxious and pale. He takes medication for hypertension. Which of the following conditions is the most likely cause?
   A. Pneumonia
   B. Aortic dissection
   C. Tension pneumothorax
   D. Acute myocardial infarction

28. A patient with abdominal pain vomits a substance that looks like coffee grounds. Of the following conditions, which one is most likely to be the cause?
   A. Acute esophageal varices
   B. Slow bleed in the stomach
   C. Arterial bleed in the stomach
   D. Slow hemorrhage in the descending colon

29. Patients who suffer from asthma typically describe their breathing difficulty as which of the following?
   A. A feeling of tightness in the chest
   B. A sharp, stabbing pain in the chest
   C. A severe pleuritic pain in the chest
   D. A burning or crushing feeling in the chest

30. Which of the following might suggest your unconscious patient is experiencing increased pressure within the brain?
   A. Symmetric pupil reactivity
   B. Constricted pupils
   C. Non-purposeful posturing (flexion or extension)
   D. Shallow respirations of 20 per minute

31. A patient with insulin dependent diabetes mellitus has suffered a rapid deterioration of his level of consciousness. Your strongest suspicion would be:
   A. Hypoglycemia
   B. Diabetic ketoacidosis (DKA)
   C. Hyperosmolar hyperglycemic nonketotic coma (HHNC)
   D. Cerebrovascular accident
32. A 54-year-old male presents confused, with family reporting a 1-week history of vomiting and diarrhea with little dietary or fluid intake. Your initial assessment reveals weak, rapid peripheral pulses. The skin is cool and nondiaphoretic with a delayed capillary refill time. The pulse oximeter reads 90% on room air. You should suspect which of the following?
   A. Distributive shock
   B. Cardiogenic shock
   C. Hypovolemic shock
   D. Septic shock

33. Which of the following signs would help confirm the suspicion of cardiogenic shock in a patient with a myocardial infarction?
   A. Crackles/rales
   B. Tachycardia
   C. Unresponsiveness
   D. Delayed capillary refill time

34. When approaching an actively seizing patient, which of the following actions should occur first?
   A. Immobilize the head, neck, and spine
   B. Place a bite block in the patient’s mouth
   C. Clear the area of furniture and other objects
   D. Complete a detailed physical exam

35. What is the most important question to ask when a patient complains of neurologic deficits?
   A. When he last ate
   B. Where was he born
   C. When did the symptoms begin
   D. What are his allergies

36. You are evaluating a very confused 36-year-old male who has been participating in a marathon on a hot and humid day. His skin is hot and dry. His vital signs are: P 126, BP 110/70, R 40. You should suspect that the patient is suffering from:
   A. Heat stroke
   B. Heat cramps
   C. Heat exhaustion
   D. Simple dehydration

37. You are assessing a 59-year-old male who is vomiting bright red blood. The patient denies shortness of breath and has a distended abdomen. Which of the following differentials would explain the patient’s current condition?
   A. Emphysema causing a hemothorax
   B. Pulmonary embolism causing rupture of pulmonary artery
   C. An acute myocardial infarction causing pericardial tamponade
   D. Increased portal pressure causing leaking esophageal varices
38. Organophosphate poisoning presents with which signs and symptoms?
   A. Dry mucus membranes
   B. Altered mental status and flushed skin
   C. Salivation and incontinence of urine and stool
   D. Euphoria and tachycardia

39. You find a stuporous 72-year-old female in obvious respiratory distress. The primary survey reveals a patent airway, labored respirations, and weak pulses. The skin is cool and diaphoretic. The capillary refill time is significantly delayed. Vital signs are P 136, BP 60/palpation, R 32/bilateral crackles. This patient is suffering from what type of shock?
   A. Septic
   B. Distributive
   C. Cardiogenic
   D. Hypovolemic

40. An age-related change that increases the risk of respiratory compromise is:
   A. Increase of mucous production
   B. Increase in intrathoracic volume
   C. Decrease in lung compliance
   D. Decrease in dead space ventilation

41. After the primary survey, what assessment component should follow for the unresponsive medical patient?
   A. Baseline vital signs
   B. Rapid medical assessment
   C. Focused medical assessment
   D. Reassess the primary patient survey

42. A female patient is in anaphylactic shock. The patient has audible upper airway noises, wheezing, and cyanosis with a decreasing level of consciousness. The appropriate immediate course of action is:
   A. Check for a pulse
   B. Calculate a respiratory rate
   C. Prepare to assist with ventilations
   D. Administer O₂ via nasal cannula at 1–6 L/min

43. You are responding to a call for nausea and vomiting. Which of the following is true?
   A. The patient will also have flu-like symptoms.
   B. Vomiting is an indication of an underlying abnormality.
   C. Vomiting represents an illness for which EMS can do little.
   D. All vomiting is handled with administration of medications.
44. A cool, clammy patient complains of burning epigastric pain that suddenly becomes knifelike and is rapidly worsening. Which of the following conditions is the most likely cause?
   A. Acute pancreatitis
   B. Perforated ulcer
   C. Inflammation of the spleen
   D. Small bowel obstruction

45. Anaphylaxis is most associated with which physiologic event?
   A. Vasodilation
   B. Hemorrhage
   C. Bradycardia
   D. Hypertension

46. While administering ventilations with a bag-valve mask to a patient breathing 6 times a minute, which of the following would best help to minimize gastric distention?
   A. Administering ventilations just until the chest rises
   B. Apply proper head-tilt and chin lift
   C. Place an oropharyngeal airway into the patient’s oral cavity
   D. Avoid delivering ventilations at a rate greater than 10/min

47. A patient complains of nausea and is passing black stools rectally. This patient is most likely suffering from:
   A. Cholecystitis
   B. Lower GI bleed
   C. Upper GI bleed
   D. Bowel obstruction

48. You respond for a report of an amphetamine overdose. Your patient is most likely to present with:
   A. Rapid pulse rate
   B. Ringing in the ears
   C. Slow pulse rate
   D. Apnea

49. The most common underlying medical condition(s) found in patients with acute pancreatitis is/are:
   A. Gall stones and heavy alcohol use
   B. Esophageal varices
   C. Mallory-Weiss syndrome
   D. Diverticulitis
50. A female patient complaining of a 3-day history of left lower abdominal pain describes it as sharp. During the focused physical exam, the pain intensifies during palpation over the site. Differentials should include:

A. Ectopic pregnancy or diverticulitis
B. Pancreatitis or gall bladder infection
C. Peritonitis or intestinal obstruction
D. Appendicitis or hepatitis