

Practice Test #1

1. All of the following can produce an Antabuse-like reaction except

- a. Antibiotics
- b. Metronidazole
- c. Cocaine
- d. Diabetic medications

2. Lead II on the ECG indicates

- a. Presence of an MI
- b. Regularity of the heartbeat
- c. Pumping capability of the heart
- d. Location of an MI

3. Regular PVCs at intervals greater than every fourth beat are known as

- a. Frequent PVCs
- b. Multifocal PVCs
- c. Ventricular quadrigeminy
- d. Trigeminal PVCs

4. Which of the following statements regarding VT is FALSE?

- a. VT may be associated with cardiac arrest
- b. P waves are usually not discernible
- c. If the rhythm results in a pulse, VT is not significant
- d. Pulseless VT should be treated the same as VF

5. The absence of any electrical activity in the heart is known as

- a. PEA
- b. Asystole
- c. Pericardial tamponade
- d. VF

6. The first step in caring for a patient with cardiac arrest should be to

- a. Set up oxygen and IV lines
- b. Immediately apply the AED
- c. Interpret the patient's cardiac rhythm
- d. Begin CPR

7. All of the following steps in the defibrillation process are valid except

- a. Double-checking the rhythm before delivering a countershock
- b. Turning on the synchronized mode when defibrillating VF
- c. Removing NTG patches before defibrillation
- d. Checking the carotid pulse if the rhythm changes

8. The best line of care for a patient who is hyperventilating is to

- a. Plug the portals of the oxygen mask to induce rebreathing
- b. Ask the patient to breathe into a paper bag
- c. Administer oxygen
- d. Administer a nebulized bronchodilator

9. Spontaneous pneumothorax may be caused by

- a. Menstruation
- b. Anxiety
- c. Carbon monoxide
- d. Oral contraceptives

10. Which of the following may be useful in a patient with carbon monoxide poisoning?

- a. Pulse oximetry
- b. Oxygen saturation
- c. Hyperbaric oxygen
- d. Blood glucose

11. All of the following may cause coma except

- a. Vitamin deficiency
- b. Hypercalcemia
- c. Hyperglycemia
- d. Fever

12. A common cause of seizures in adults is

- a. Fever
- b. Infection
- c. Vitamin deficiency
- d. Catatonia

13. Which of the following statements regarding seizure is FALSE?

- a. Seizure patients may bite their tongue
- b. Seizure may result in a neurological condition similar to stroke
- c. Restraining muscle movement may stop a seizure
- d. A patient may become violent after a seizure

14. The roommate of a 21-year-old woman calls you to their apartment. The young woman has severe abdominal pain and vaginal bleeding and has gone into shock. This patient is most likely suffering from

- a. Appendicitis
- b. PID
- c. Bowel obstruction
- d. Ectopic pregnancy

15. The best course of treatment for a patient with hypoglycemia is to give the patient

- a. Saccharine
- b. Aspartame
- c. Oral glucose
- d. Insulin

16. Which of the following conditions is associated with an acetone-like breath odor?

- a. Hypoglycemia
- b. Hyperglycemia
- c. Diabetes
- d. DKA

17. Signs and symptoms of HHNC include

- a. Kussmaul respirations
- b. Fruity breath odor
- c. Altered mental status
- d. Rapid pulse

18. Treatment of a poisoning victim should involve all of the following except

- a. Determining the exact substance the patient has taken
- b. Placing the patient on a cardiac monitor
- c. Proper positioning of the patient
- d. Pulse oximetry

19. Proper care for a patient with heat stroke includes

- a. Salt pills
- b. Diuretics
- c. Air conditioning
- d. Cold drinks

20. Which of the following statements regarding hypothermia is FALSE?

- a. Hypothermia may resemble cardiac arrest
- b. Rewarming the extremities may increase body temperature
- c. Hypothermia may mimic death
- d. Rewarming the extremities may decrease body temperature

21. Asthma in children is associated with

- a. Age 6 to 18 months
- b. Viral infection
- c. Family history
- d. Pneumonia

22. In pediatric patients, bronchiolitis is

- a. Seasonal
- b. Caused by a virus
- c. Associated with asthma
- d. Responsive to medication

23. The most important intervention in a child with head trauma is

- a. Immobilization
- b. Ventilation
- c. Resuscitation
- d. Transport

- 24. The first line of treatment for a child with severe hypothermia should include**
- Performing CPR
 - Rubbing the affected extremities
 - Endotracheal intubation
 - High-concentration oxygen
- 25. All of the following may be used in patients with shock except**
- Lactated Ringer's solution
 - 5% Dextrose in water
 - Normal saline
 - Plasma
- 26. All of the following are symptoms of cholinergic crisis except**
- Salivation
 - Incontinence
 - Cardiac arrest
 - Emesis
- 27. In patient triage, which of the following conditions would be considered high-priority?**
- Respiratory arrest
 - Burns
 - Shock
 - Spinal cord damage
- 28. An Apgar score of 10 in a newly born infant indicates**
- Moderate distress
 - No distress
 - Severe distress
 - Cyanosis
- 29. The first step in treatment of cardiopulmonary arrest in a newly born infant is**
- Intubation
 - IV fluids
 - Ventilation
 - Atropine
- 30. The Apgar score should be obtained**
- One to five minutes after birth
 - Before beginning resuscitation
 - Immediately at birth
 - Only if resuscitation is needed
- 31. The "G" component of the Apgar score stands for**
- Grimace
 - Grasp
 - Good respiratory effort
 - Growth

32. Which of the following may be administered to a newborn with hypoglycemia and altered consciousness?

- a. 25% dextrose and water
- b. 10% dextrose and water
- c. 50% dextrose and water
- d. Ringer's lactate

33. After an infant's head is delivered, the first line of action should be to

- a. Suction the nose
- b. Suction the mouth
- c. Cover the head
- d. Dry the head

34. Secondary apnea in a newborn is treated by

- a. Touching the infant
- b. Suctioning the mouth
- c. Suctioning the nose
- d. Assisted ventilation

35. Drug withdrawal or overdose may be treated by

- a. Antabuse
- b. Oxygen
- c. Ice immersion
- d. Ipecac

36. All of the following may mimic alcohol intoxication except

- a. Hypoglycemia
- b. Head trauma
- c. Antabuse
- d. Drug abuse

37. In elderly patients, symptoms of which of the following can mimic those of cardiac or respiratory conditions?

- a. Alcohol abuse
- b. Drug abuse
- c. Depression
- d. Psychosis

38. The drug cocaine is classified as a

- a. Hallucinogen
- b. Stimulant
- c. Narcotic
- d. Depressant

39. The suffix "phasia" refers to

- a. Speech
- b. Fear
- c. Order
- d. Eating

Answer Key and Explanations for Test #1

1. C: Some commonly prescribed drugs can produce a reaction similar to that of the drug disulfiram (Antabuse), used in patients with chronic alcohol abuse, following alcohol ingestion; these drugs include metronidazole, antibiotics, and oral diabetic medications.

2. B: Lead II on the ECG is most commonly used for continuous patient monitoring in the prehospital setting and indicates the rate and regularity of the patient's heartbeat; however, it does not indicate the presence or location of a myocardial infarction (MI) or the pumping capability of the heart.

3. A: Regular premature ventricular complexes (PVCs) occurring at intervals greater than every fourth beat are simply called frequent PVCs; a PVC at every fourth beat is known as ventricular quadrigeminy and at every third beat, ventricular trigeminy or a trigeminal PVC. PVCs arising in several areas of the ventricles that differ from each other are known as multifocal PVCs.

4. C: Ventricular tachycardia (VT) is a condition in which three or more PVCs occur in a row; P waves are usually not discernible, and T waves may or may not be present. VT should always be considered significant, even if the rhythm results in a pulse as it may lead to cardiac arrest. Patients with pulseless VT should be treated the same as those with ventricular fibrillation (VF).

5. B: The absence of any electrical activity in the heart is known as asystole. Pulseless electrical activity (PEA) is a condition in which electrical activity in the heart is not properly converted to effective cardiac contraction; pericardial tamponade is a reversible cause of PEA. Ventricular fibrillation (VF) is the erratic firing of multiple sites in the ventricle.

6. D: The first step in caring for a patient with cardiac arrest is to immediately begin CPR. If only one EMT-I is present, he or she should perform CPR according to local protocols and then apply the automated external defibrillator (AED); if two or more EMT-I's are present, one should perform CPR and the other operate the AED. Defibrillation should not be delayed to set up oxygen or IV lines. Because the AED automatically analyzes heart rhythm, it is not necessary for an EMT-I to interpret cardiac rhythms to use an AED.

7. B: When defibrillating a patient with ventricular fibrillation (VF), the EMT-I should ensure that the synchronized mode is turned off. NTG patches should be removed before defibrillation to prevent the patch from exploding and burning the patient. Before delivering a countershock, the EMT-I should double-check the rhythm to ensure that the patient has not reverted to another rhythm. Upon changes in the rhythm or following three sequential shocks, the carotid pulse should be checked.

8. C: When treating hyperventilation, oxygen should be given by nasal cannula. Having the patient breathe into a paper bag or blocking off the portals of an oxygen mask to induce rebreathing is no longer considered acceptable practice as it may lead to hypoxia. Nebulized bronchodilators are used to treat acute chronic obstructive pulmonary disease (COPD).

9. A: Spontaneous pneumothorax is frequently caused by rupture of a congenital defect on the surface of the lung and may be secondary to the swelling and rupture of endometrial tissue in the lung during the menstrual cycle. Anxiety is a cause of pulmonary embolism, which is associated with obesity, thrombophlebitis, and use of oral contraceptives. Carbon monoxide poisoning is not associated with spontaneous pneumothorax.

10. C: In the case of carbon monoxide poisoning, pulse oximetry and oxygen saturation readings may be inaccurate; hyperbaric oxygen may be useful if the patient is unresponsive, combative, or hallucinating. Measuring the blood glucose level may be useful in stroke patients.

11. D: Coma may result from intracranial causes, such as intracranial bleeding, stroke, and infection or from causes outside of the nervous system, such as vitamin deficiency, hyper- or hyponatremia, hypercalcemia, and hyper- or hypoglycemia. Fever may induce seizures in children, and rarely, in adults.

12. B: In adults, seizures may be caused by infections (such as meningitis or encephalitis), trauma, metabolic abnormalities (such as hypercalcemia and hypoglycemia), and liver or kidney failure. Febrile convulsions may cause seizures in children; however, fever is rarely the cause of seizures in adults. Psychiatric conditions such as catatonia may result in coma.

13. C: Restraining a patient during a seizure is not effective in stopping the seizure; placing a pillow or rolled blanket under the patient's head may help prevent injury. During a seizure, patients may bite their mouth or tongue. Following a seizure, patients may become violent. In some patients, a condition may develop that resembles the paralysis experienced by stroke victims; however, the paralysis only lasts for one to two hours.

14. D: Vaginal bleeding and severe abdominal pain in a woman of child-bearing age is most probably due to a ruptured ectopic pregnancy. Appendicitis is associated with right lower quadrant abdominal pain and bowel obstruction with abdominal distention; pelvic inflammatory disease (PID) is inflammation of the female internal genitalia due to sexually transmitted disease and is marked by lower abdominal pain, vaginal discharge, fever, and chills.

15. C: For a patient with hypoglycemia, the best course of treatment is to give the patient oral glucose or sugar; sugar substitutes such as saccharine or aspartame are not effective because they do not contain sugar. Insulin should never be given to a patient who may be diabetic.

16. D: Diabetic ketoacidosis (DKA) is associated with a fruity, acetone-like odor of the breath; however, this does not occur in all patients with DKA.

17. C: Hyperosmolar hyperglycemic nonketotic coma (HHNC) typically occurs in patients older than 60 years living in a nursing home or institutional setting and may result from infection, extreme cold, or dehydration. HHNC is usually associated with gradual deterioration of mental status. Kussmaul respirations and fruity breath odor are associated with DKA and are absent in patients with HHNC.

18. A: In treating a patient who has ingested poison, it is not necessary for the EMT-I to determine the exact substance the patient has taken. The airway should be maintained and pulse oximetry monitored; the patient should be placed on a cardiac monitor and positioned in the left lateral recumbent position to prevent aspiration.

19. C: In caring for a patient with heat stroke, placing the patient in a cool environment, such as an air-conditioned ambulance, as soon as possible is vital to prevent brain damage. Salt pills or cold, salty, or sweet drinks should not be given to prevent nausea and vomiting. Heat exhaustion commonly occurs in patients taking diuretics.

20. B: Severe hypothermia may mimic cardiac arrest or clinical death. In treating a patient with hypothermia, rewarming of the extremities may actually decrease body temperature and lead to shock.

21. C: In pediatric patients, asthma can occur at any age and may be a response to allergy or exercise; most pediatric asthma patients have a family history of asthma. Viral infection is associated with bronchiolitis. Pneumonia is an infection of the lower airway or lung caused by a bacteria or virus.

22. B: In pediatric patients, bronchiolitis is an infection of the lower respiratory tract caused by a virus; it may occur at any time and is not associated with a history of asthma. Bronchiolitis is often unresponsive to medication.

23. B: The most important intervention in a child with head trauma is ventilation by either bag-valve-mask device or endotracheal intubation to prevent further injury and sustain neurologic function.

24. D: The first priority in treating a child with severe hypothermia is to maintain the airway by providing high-concentration oxygen. Stimulation, including endotracheal intubation, CPR, or suctioning, should be avoided to prevent ventricular fibrillation; rubbing the affected extremities can cause further tissue damage.

25. B: Normal saline and lactated Ringer's solution may be used in patients with shock; however, 5% dextrose in water is not recommended. Plasma may be given in the hospital setting.

26. C: The acronym SLUDGE may be used as a mnemonic device for the symptoms of cholinergic crisis: Salivation, Lacrimation, Urinary incontinence, Defecation (or fecal incontinence), Generalized weakness, and Emesis.

27. C: According to proper triage methods, a patient with signs and symptoms of shock would be considered highest priority; those with burns but without airway compromise or with back injuries with or without spinal cord damage would be considered second priority. A patient in respiratory or cardiopulmonary arrest would be considered lowest priority.

28. B: An Apgar score of 7 to 10 in a newly born infant indicates mild or no distress; a score of 4 to 6 indicates moderate distress, such as cyanosis, and a score of 0 to 3 indicates severe distress.

29. C: The first step in treatment of cardiopulmonary arrest in a newly born infant is to provide ventilation and oxygenation. If the problem does not resolve, intubation, IV fluids, and medications such as atropine, epinephrine, lidocaine, or naloxone should be administered.

30. A: The Apgar score should be obtained in a newly born infant 1 to 5 minutes after birth; waiting to obtain the Apgar score before beginning resuscitation may have disastrous consequences.

31. A: The components of the Apgar score are as follows: A indicates appearance or color; P, pulse or heart rate; G, grimace or irritability; A, activity or muscle tone; and R, respirations.

32. B: Only 10% dextrose and water can be safely given to a newborn infant with hypoglycemia and altered consciousness; hyperosmotic agents such as 25% dextrose and water or 50% dextrose and water may cause hemorrhage. Ringer's lactate is used in the treatment of hypovolemia.

33. B: Immediately after the infant's head is delivered, suction the mouth and then the nose to stimulate breathing. The infant's head, face, and body should then be dried; after this, the head should be covered with a blanket, towel, or hat to prevent heat loss.

34. D: Primary apnea occurs when a newborn is not visibly breathing and may be reversed by touching and stimulating the infant and/or suctioning. Secondary apnea occurs if oxygen

deprivation continues; secondary apnea cannot be reversed by stimulation or suctioning and may require assisted ventilation, including bag-mask ventilation with high-concentration oxygen.

35. B: In the case of drug withdrawal or overdose, maintain the airway and monitor the patient's respiratory status; oxygen may be given by nasal cannula or nonbreather mask as per local protocol. Ipecac is seldom prescribed for use in the field and has largely been replaced by activated charcoal and gastric lavage, usually in the hospital. Ice immersion is a form of street treatment and is ineffective. Antabuse, or disulfiram, is a medication taken by patients with chronic alcohol abuse.

36. C: Drug abuse, head trauma, and medical conditions such as hypoglycemia and diabetic ketoacidosis may mimic alcohol intoxication; Antabuse, or disulfiram, is a medication prescribed for patients with chronic alcohol abuse.

37. C: In elderly patients, depression can present as organic illness, such as cardiac or respiratory disease.

38. B: Cocaine is the most widely abused stimulant drug; heroin, morphine, and hydrocodone (Vicodin) are classified as narcotics. LSD, PCP, and mescaline are common hallucinogens; marijuana and barbiturates are common depressants.

39. A: The suffix "phasia" refers to speech; thus, the term aphasia means inability to speak.

40. C: The prefix "endo" refers to within or inner; thus, the term endometrium means within the uterus.

41. D: Cardiac tamponade is associated with penetrating chest trauma in which the pericardial sac fills with fluid, resulting in the signs and symptoms of shock.

42. B: COPD and respiratory failure may block the ability of the lungs to blow off carbon dioxide, causing a build-up of acid in the blood; this condition is referred to as respiratory acidosis. Respiratory alkalosis results from a deficit of carbon dioxide due to hyperventilation, making the blood more alkaline or basic.

43. B: Aspirin is indicated for patients with acute myocardial infarction. Adenosine is indicated for supraventricular tachycardia (SVT) and paroxysmal SVT (PSVT); amiodarone is indicated for ventricular fibrillation (VF) and ventricular tachycardia (VT) and dexamethasone for shock and various inflammatory and allergic disorders.

44. C: Children and geriatric patients have an increased sensitivity to vasopressin; thus, vasopressin is contraindicated in these patients. Vasopressin is indicated as an alternative to the first or second dose of epinephrine for the treatment of shock-refractory ventricular fibrillation (VF), asystole, or pulseless electrical activity (PEA).

45. B: Epinephrine is contraindicated in patients with hypertension, hypothermia, and pulmonary edema; it is indicated in cardiac arrest and asthma.

46. B: During law enforcement operations, the area of immediate or direct threat is known as the hot zone or kill zone; an area of potential threat is known as the warm zone, and an area posing no threat is known as the cold zone.

47. D: Asymmetric pupils in an elderly patient may result from glaucoma or other ocular diseases or from cataract surgery.