

2016 National Metal and Nonmetal Mine Rescue Contest

First Aid Competition Written Test

Directions:

- 1. Find the correct answer to each of the questions.**
- 2. Select only one answer per question.**
- 3. Then, fill in the corresponding circle on the answer sheet for each numbered question.**

Good Luck!



July 25, 2016

Please do not write on this test. Use the answer sheet provided.

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1. The term _____ refers to the guidelines recommended by the Centers for Disease Control and Prevention:
 - a) Standard Precautions
 - b) Body Substance Identification
 - c) Universal Predictions
 - d) BioHazard

2. Under the right conditions, pathogens multiply and produce harmful effects. They enter the body in one of four ways _____:
 - a) Injection, Induction, Absorption, Inhalation
 - b) Absorption, Injection, Respiration, Inhalation
 - c) Ingestion, Injection, Absorption, Inhalation
 - d) Respiration, Puncture, Ingestion, Injection

3. When approaching an emergency accident scene involving multiple vehicles:
 - a) Ensure the area is searched for possible patients who were ejected
 - b) Chock the wheels on all vehicles
 - c) Notify dispatch of the number of patients
 - d) Ensure the scene is safe to enter

4. When assessing a patient's abdominal area, be sure to:
 - a) Palpate the soft areas of the thoracic on each side
 - b) Place the patient in a supine position
 - c) Palpate the soft areas to the rear of the abdomen on each side
 - d) Palate the popliteal region

5. The main function of the Respiratory System is primarily responsible for:
 - a) Carrying oxygenated blood back to the heart and lungs
 - b) Exchange of oxygen and carbon dioxide
 - c) Carry well-oxygenated blood and other nutrients to the body's cells
 - d) Provided structure, support and protection for the body's internal organs

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6. A firefighter's drag is:
- a) The patient's hands are secured behind the rescuer's neck
 - b) Considered an emergency move
 - c) A move in which the rescuer straddles the patient
 - d) All of the above
7. The Trendelenburg position may be used for patients who you suspect may be suffering from shock:
- a) True
 - b) False
8. A *jaw thrust maneuver* is:
- a) Used when a patient has a suspected femoral fracture
 - b) Used when a pocket face mask for ventilations is not available
 - c) Used by professional rescuers when there is a possible neck or spine injury
 - d) Used when a patient has no suspected neck or spine injuries
9. A _____ is a device used to help provide ventilations. It has a chimney with a one-way valve and HEPA filter. Some have an inlet for supplemental oxygen:
- a) Pocket face mask
 - b) AED
 - c) Nasopharyngeal airway
 - d) OPA
10. When ventilating a patient with a stoma, keep the patient's head in a neutral position, ensure the stoma is free of obstruction, pinch the nose closed and ventilate over the stoma:
- a) True
 - b) False
11. When the airway is completely obstructed, the responsive patient will be unable to speak, breathe or cough:
- a) True
 - b) False

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12. The American Heart Association's adult Chain of Survival is a linked system of patient care events specific to patients in cardiac arrest; the five links in the chain are:

- a) Open airway, rescue breathing, chest compressions, call 911, transport
- b) Immediate recognition of cardiac arrest, immediate AED, chest compressions, activate 911, and maintain open airway
- c) Immediate recognition of cardiac arrest and activation of the emergency response system, early CPR with an emphasis on chest compressions, rapid defibrillation, effective advanced life support, and integrated post-cardiac arrest care
- d) Open airway, immediate CPR with an emphasis on chest compressions, advanced EMT's and Paramedic care, early defibrillation

13. During cardiopulmonary resuscitation (CPR) you must:

- a) Perform chest compressions to circulate the blood
- b) Ensure and maintain an open airway
- c) Breathe (ventilate) for the patient
- d) All of the above

14. Effective CPR depends on the correct rate and ratio of compressions and ventilations, for effective CPR on an adult you must:

- a) Deliver ventilations at a rate of 30 to 1 compression
- b) Deliver compressions at a rate of at least 100 per minute
- c) Provide 15 compressions to 1 ventilation
- d) Provide oxygen supplied at 15 LPM with a nonrebreather mask delivers.

15. When performing one-rescuer CPR on an adult, if the patient has a carotid pulse, but no respirations you should:

- a) Provide two breaths every six to eight seconds or 15 breaths every minute
- b) Provide one breath every five to six seconds or 10 to 12 breaths a minute
- c) Attach AED electrodes and analyze
- d) Neither a or b

16. During two-rescuer CPR, after every 30 compressions, deliver two breaths:

- a) True
- b) False

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17. AED's are capable of recognizing two very specific abnormal heart rhythms. Ventricular Tachycardia is described as:
- a) A rapid rhythm that originates in the atrium
 - b) A disorganized electrical activity in the aorta
 - c) A condition that produces no electrical activity in the heart
 - d) A rapid rhythm that originates in the ventricles and rarely produces a pulse
18. A sign is something you can see and observe about your patient. A symptom is something the patient feels and may complain about. Some common signs are:
- a) Chest pressure and shortness of breath
 - b) Blood pressure, pulse and respirations
 - c) Fatigue, cough and anxiety
 - d) Nausea, headache and dizziness
19. The mnemonic OPQRST is commonly used for the assessment of pain and discomfort. The R stands for:
- a) Regulating
 - b) Radiate
 - c) Reduction
 - d) Rounding
20. Perfusion is the adequate supply of well-oxygenated blood to all parts of the body.
- a) True
 - b) False
21. When determining your patient's mental status or level of consciousness during your initial assessment using the AVPU Scale, the V in the acronym means:
- a) Verbal
 - b) Visual
 - c) Vaccinated
 - d) Veins
22. When taking a patient's pulse, you must assess for three characteristics:
- a) Radial, peripheral, and normality
 - b) Pacing, diastolic and systolic
 - c) Radial, brachial and femoral
 - d) Rate, strength and rhythm

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23. When assessing blood pressure on a conscious adult, the pressure generated within the arteries when the heart contracts is called the _____ blood pressure:
- a) Systolic
 - b) Systemic
 - c) Diastole
 - d) Dynamic
24. When responding to an emergency on a trauma patient with no significant mechanism of injury, you will FIRST:
- a) Obtain baseline vital signs
 - b) Conduct a secondary assessment based on the patient's chief complaint
 - c) Perform a scene size-up and primary assessment
 - d) Begin CPR with 30 compressions
25. A common cause of cardiac compromise is known as _____:
- a) Level of consciousness
 - b) Angina pectoris
 - c) Myocardial infection
 - d) Rapid infarction
26. When arteries become excessively narrow or blocked from disease or a clot and can no longer supply the heart with enough oxygenated blood, the tissue of the heart begins to die. The medical term for a heart attack is:
- a) Congestive heart failure
 - b) Angina pectoris
 - c) Myocardial infarction
 - d) Cardiac inflection
27. There are over 60 regional poison control centers in the U.S. that can be reached by calling 1-800-222-1222 or by contacting the EMS dispatcher
- a) True
 - b) False
28. Sweating is one of the body's ways of ridding itself of excessive heat. On a really hot day, you can lose up to _____ of sweat per hour:
- a) 1 liter
 - b) 2 gallons
 - c) 2 ounces
 - d) 2 cups

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29. If a sucking chest wound is not identified and promptly carded for, it can result in the development of a _____ which allows air to build up in the chest cavity causing excessive pressure.

- a) Tracheal pneumothorax
- b) Occlusive open thorax
- c) Pressure thoracic
- d) Tension pneumothorax

30. Treating an abdominal evisceration includes:

- a) Position the patient on his back and have the patient bend his knees
- b) Place a large moist sterile dressing over the wound
- c) Cover the moist dressing with plastic to contain moisture
- d) All of the above

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ANSWER KEY - Reference Ninth Edition of Brady “First Responder”

1. a)Pg. 39
2. c)Pg. 40
3. d)Pg. 44
4. c)Pg. 65
5. b)Pg. 67
6. d)Pg. 96, 98
7. a)Pg. 108
8. c)Pg. 142
9. a)Pg. 144
10. b)Pg. 147
11. a)Pg. 150
12. c)Pg. 187
13. d)Pg. 188
14. b)Pgs. 195
15. b)Pg. 197
16. a)Pg. 198
17. d)Pg. 205
18. b)Pg. 216, 217
19. b)Pg. 220
20. a)Pg. 221
21. a)Pgs. 221, 253
22. d)Pg. 225
23. a)Pg. 227
24. c)Pg. 244
25. b)Pg. 278
26. c)Pg. 278
27. a)Pg. 317
28. a)Pg. 336
29. d)Pg. 469
30. d)Pg. 474