

**2010 National Metal and Nonmetal Mine Rescue Contest
First Aid Competition – Written Test**

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

1. Your patient has a deformity to the midshaft of the forearm. He most likely has suffered an injury to which of the following bones?
 - a) Femur
 - b) Patella
 - c) Fibula
 - d) Radius*

2. The appendix is located in the:
 - a) Right upper quadrant
 - b) Right lower quadrant*
 - c) Left upper quadrant
 - d) Left lower quadrant

3. The Alveolar Sacs are located in which body system?
 - a) Circulatory System
 - b) Respiratory System*
 - c) Digestive System
 - d) Nervous System

4. The body system that includes the heart, blood vessels, and blood is the:
 - a) Respiratory system
 - b) Circulatory system*
 - c) Musculoskeletal system
 - d) Nervous system

5. An emergency move should be considered in the following situations:
 - a) Impending structural collapse
 - b) Inability to properly manage uncontrolled bleeding
 - c) Both a & b*
 - d) Neither a nor b

6. The best position to place a patient who has no spinal injury and is breathing is:
- a) Recovery*
 - b) Fowlers
 - c) Supine
 - d) Prone
7. Once a cervical collar is in place on a patient with a suspected spine injury you should:
- a) Conduct and head to toe examination
 - b) Maintain manual stabilization of the head*
 - c) Prepare the spine board to immobilize the patient
 - d) Assess the airway, breathing and circulation
8. The trachea is:
- a) Formed by tubes that branch from the throat and take air to the lungs
 - b) An air passage to the lungs*
 - c) A leaf-shaped structure that covers the larynx
 - d) A food passage with carries food and fluid to the stomach
9. Signs of a partial airway obstruction are all of the following EXCEPT:
- a) Snoring
 - b) Coughing with blue, gray or ashen skin
 - c) Wheezing
 - d) No sounds when attempting to speak*
10. After opening the mouth to assess the airway of a trauma patient during your initial assessment, you note a large amount of blood in the oropharynx. Your next immediate action should be:
- a) Suction the blood from the mouth*
 - b) Apply a nonrebreather mask and administer oxygen at 15 Lpm
 - c) Begin ventilating the patient with a pocket mask
 - d) Assess the carotid or radial pulse
11. The pocket mask device without an oxygen source will deliver what percentage of oxygen to the patient?
- a) 21 percent
 - b) 35 percent
 - c) 15 percent*
 - d) 100 percent

12. Determining the total number of patients at a scene is part of the:
- a) Initial assessment
 - b) Focused history
 - c) Patient assessment
 - d) Scene size-up*
13. Which of the following is NOT a component of the scene size up?
- a) Take BSI precautions
 - b) Determine scene safety
 - c) Assess the patient's airway, breathing and circulation*
 - d) Identify the mechanism of injury or nature of illness
14. Categorization of the patient as trauma is based primarily on what two factors?
- a) Scene size up and the patients vital signs
 - b) Immediate assessment of the scene and initial assessment
 - c) Assessment of the scene and mechanism of injury*
 - d) Immediate assessment of the scene and the patients mental status
15. Your patient's level of responsiveness or mental status is determined by using the letters:
- a) AEIOU
 - b) OPQRST
 - c) DCAP-BTLS
 - d) AVPU*
16. The 2005 American Heart Association Guidelines for CPR say that in adult CPR; the compression to ventilation ratio is:
- a) 5 compressions to 1 ventilation
 - b) 15 compressions to 2 ventilations
 - c) 30 compressions to 1 ventilation
 - d) 30 compressions to 2 ventilations*
17. How do you know you are performing effective CPR?
- a) The patient may try to swallow, gasp or move his limbs
 - b) You see the chest rise and fall during ventilations
 - c) Sometimes skin color improves
 - d) All of the above*

18. The type of AED that requires a rescuer to press a button to deliver a shock is called a:
- a) Fully automated
 - b) Semi automated*
 - c) Manual
 - d) None of the above
19. An AED will NOT be effective on the following heart rhythm:
- a) Ventricular-fibrillation
 - b) Ventricular-tachycardia
 - c) Bradycardia
 - d) Asystole*
20. Which of the following is NOT a part of the American Heart Association's chain of survival?
- a) Early access
 - b) Early CPR
 - c) Early diagnosis*
 - d) Early defibrillation
21. Emergency care for a COPD patient includes:
- a) Ensure an open airway, breathing and circulation
 - b) Place patient in a position of comfort
 - c) Monitor vital signs
 - d) All of the above*
22. When a blood vessel in the brain ruptures, the patient is said to have:
- a) Heart attack
 - b) Chronic obstructive pulmonary disease
 - c) Cerebrovascular accident*
 - d) Seizure
23. Anaphylactic shock occurs when:
- a) Hot and humid environments can cause the body to generate too much heat
 - b) Patients experience conditions that cause them to become violent and uncooperative
 - c) People come in contact with a substance to which they are allergic*
 - d) Irregular electrical activity in the brain that can cause a sudden change in behavior or movement

24. Your patient is bleeding from a laceration to the forearm. The artery or pressure point that should be used to control bleeding is the:
- a) Ulna artery
 - b) Radial artery
 - c) Femoral artery
 - d) Brachial artery*
25. If bleeding from the lower leg is not controlled with direct pressure and no fracture is suspected, you should also:
- a) Utilize a pressure point
 - b) Elevate the extremity*
 - c) Use a tourniquet
 - d) Rapidly apply an air splint
26. A fracture is defined by:
- a) Bone that is broken, chipped, cracked or splintered
 - b) Occurs when one end of a bone that is part of a joint is pulled or pushed*
 - c) Ligaments or tendons that stretch or tear
 - d) Overexerting, overworking, overstretching or tearing of a muscle
27. When splinting an injury to the extremity you should:
- a) Check distal circulation, sensation and motor function before splinting
 - b) Check distal circulation, sensation and motor function after splinting
 - c) Firmly secure the splint, leaving fingertips or toes exposed
 - d) All of the above*
28. When treating a patient with a flail chest you should apply a bulky pad or dressings, several inches thick, over the site;
- a) True*
 - b) False
29. Your respond to a patient with hyperglycemia. The first emergency care you take should be:
- a) If the patient is alert and you are not sure if the problem is too much sugar or too little, give the patient sugar, candy, orange juice or a soft drink.
 - b) If the patient is alert have them administer oral glucose to themselves
 - c) Administer oxygen per local protocols
 - d) Perform a scene size-up, including taking BSI precautions*

30. Routes of exposure to poisons are:

- a) Ingestion, inhalation, absorption, injection*
- b) Ingestion, inspiration, injection, absorption
- c) Absorption, conduction, ingestion, injection
- d) Inhalation, digestion, injection, absorption