

**2007 Northern Mine Rescue Contest
Rochester, NY
Written Test – First Aid Competition**

Name_____ **Company**_____

Team Name_____ **Contest Position No.**_____

Team Member No._____

Directions: Circle the letter preceding the correct answer to each of the following questions. Circle only one answer per question.

1. The body system that brings oxygen to the body and removes carbon dioxide is the:

a) respiratory
b) circulatory
c) musculoskeletal
d) nervous

2. _____ is the anatomical term meaning front.

a) posterior
b) anterior
c) distal
d) proximal

3. All descriptions of the body start with the assumption that the body is:

a) anatomical
b) physiological
c) directional
d) supine

4. The body system that controls movement, interprets sensations and regulates body activities is:

a) respiratory
b) circulatory
c) musculoskeletal
d) nervous

5. The primary concern of a First Responder in an emergency is:

- a) traffic control
 - b) patient care
 - c) personal safety
 - d) patient assessment
6. A symptom is defined as something the patient tells you.
- a) true
 - b) false
7. Which technique best protects your back from injury when lifting a heavy object?
- a) lifting with a twisting motion
 - b) hyper-extending your back by leaning backwards
 - c) keeping the weight as close to your body as possible
 - d) keeping your back in a relaxed unlocked position
8. The preferred method to move a responsive, non-injured patient down steps is by the use of a:
- a) long-spine board
 - b) ambulance stretcher
 - c) stair chair
 - d) vest-type immobilization device
9. Which patient is breathing adequately?
- a) 8-year-old breathing 12 times a minute with shallow tidal volume
 - b) 3-month-old breathing 40 times a minute with abdominal movement
 - c) 22-year-old breathing 26 times a minute with excessive accessory muscle use
 - d) 61-year-old breathing 42 times a minute with a history of smoking
10. You arrive on scene and find a patient who fell off a scaffolding from about 30 feet. Upon assessment, you find snoring sounds, respirations are approximately 30 per minute and shallow, a radial pulse is absent, the carotid pulse is weak and rapid at about 130 bpm, and the skin is pale, cool and clammy. You should immediately:
- a) immobilize the patient on a spine board
 - b) apply a cervical spinal immobilization collar
 - c) stabilize the head and neck and apply a non-rebreather mask at 15 lpm and transport the patient
 - d) perform a jaw-thrust maneuver with inline stabilization and begin pocket mask ventilation

11. Ventilation of a patient with a BVM device (*bag valve mask*) is best performed by a minimum of _____ rescuers.
- a) one
 - b) two
 - c) three
 - d) four
12. All of the following are indications that you are ventilating your patient adequately **except**:
- a) the chest rises and falls with each ventilation
 - b) the heart rate slows from 130 bpm to 80 bpm in an adult patient
 - c) the movement of the abdomen increases with each ventilation
 - d) the skin color begins to return to normal
13. Abdominal thrusts are performed in an attempt to relieve an airway obstruction in:
- a) infants, children, and adults
 - b) infants and children
 - c) children and adults
 - d) adults only
14. You arrive on scene and find an unresponsive 10-year-old lying face down on the couch. After ensuring the scene is safe, you place the patient in a supine position, open the airway and check for breathing. There is no air movement and the chest is not rising. You attempt to ventilate the patient but are unable to. What would be your next immediate action?
- a) reposition the head and jaw and attempt to ventilate again
 - b) perform a finger sweep followed by another attempt to ventilate
 - c) perform five abdominal thrusts and inspect the airway
 - d) perform five back blows and five chest thrusts followed by a finger sweep
15. Oropharyngeal airways should only be used on:
- a) semi-conscious patients
 - b) unresponsive patients with no gag reflex
 - c) Patients with dentures
 - d) Infants with an obstructed airway

16. Scene safety begins:

- a) when you have reached the patient's side
- b) just prior to reaching the patient's side, so the patient will not be distracted when performing the initial assessment
- c) as you are arriving at the scene and before exiting your response vehicle
- d) as you approach the scene once you have exited the response vehicle

17. A patient who opens his eyes only when instructed to do so is considered to be:

- a) disoriented and responsive to verbal stimuli
- b) responsive to verbal stimuli
- c) alert and disoriented
- d) alert and oriented

18. You find a diabetic patient lying supine on the floor at the bottom of the stairs. After performing an initial assessment, your first priority should be to:

- a) determine the mental status
- b) provide manual in-line spinal stabilization
- c) assess the patient's airway
- d) assess the patient's breathing and pulse

19. You arrive on the scene and find a patient who fell from a tree. His pants are soaked with blood. You expose the injured area and find a large laceration with a steady flow of blood. You should immediately:

- a) press your gloved hand firmly over the wound
- b) apply a tourniquet directly below the wound
- c) place a pressure dressing over the wound site
- d) apply digital pressure to the nearest proximal pressure point

20. The medical term for swelling is:

- a) erythema
- b) edema
- c) ecchymosis
- d) contusion

21. Which of the following is **not** a component of basic cardiopulmonary resuscitation?

- a) administration of medications
- b) compression of the chest
- c) positive pressure ventilation
- d) establishing responsiveness

22. Patients who complain of chest pain:

- a) require the application and use of the AED
- b) require the AED only if in respiratory arrest
- c) may deteriorate to cardiac arrest
- d) will go into cardiac arrest within one hour

23. Your patient woke this morning and felt dizzy. He also experienced nausea with vomiting. You note incomprehensible speech and unequal pupils. You suspect:

- a) heart attack
- b) stroke
- c) low blood sugar level
- d) seizure disorder

24. If bleeding from the lower leg is not controlled with direct pressure, you should also:

- a) utilize a pressure point
- b) elevate the extremity
- c) use a tourniquet
- d) rapidly apply an air splint

25. A partial thickness burn involves:

- a) the epidermis only
- b) the epidermis and dermis
- c) the dermis and muscle
- d) dermis, fat, and muscle

Answer Key for Northern Mine Rescue Contest First Aid Competition - Written Test

Q **A**

1. a

2. b

3. a

4. d

5. c

6. a

7. c

8. c

9. b

10. d

11. b

12. c

13. c

14. a

15. b

16. c

17. b

18. b

19. a

20. b

21. a

22. c

23. b

24. b

25. b