

# 2012 Metal/Nonmetal National Mine Rescue Contest

## First Aid Competition – Written Test

### Answers and Rationales - 8<sup>th</sup> Edition of Brady “First Responder”

1. **D) Thoracic cavity** – *The Thoracic cavity, also known as the chest cavity houses the heart. Lungs, great blood vessels, part of the esophagus and windpipe. - Pages 64.*
2. **A) Right upper quadrant** - *The abdomen is divided into four abdominal quadrants. There quadrants are; 1) the right upper quadrant (RUQ) containing most of the liver, the gallbladder, and part of the small and large intestine; 2) the left upper quadrant (LUQ) containing most of the stomach, the spleen and part of the small and large intestine; 3) the right lower quadrant (RLQ) containing the appendix and part of the small and large intestine; 4) the left lower quadrant (LLQ) containing part of the small and large intestine. - Page 65.*
3. **B) Respiratory system** - *The respiratory bronchioles turn into alveoli ducts. These form alveolar sacs that are made up of the alveoli. Gas exchange takes place between the alveoli and capillaries in the lungs. - Page 73.*
4. **B) Circulatory system** - *The circulatory system moves blood, carries oxygen and nutrients to the body's cells, and removes wastes and carbon dioxide from these cells. It includes the pulmonary valve, ventricles, and aortic valve. - Page 71.*
5. **C) Always dragged head first** - *An emergency move should be considered when the patient and/ or rescuers are in immediate danger or when life-saving care cannot be given because of the patient's location. The incline drag is always done head first. - Page 86.*
6. **A) Basket Stetcher** – *Are used to transport patients over rough terrain and in high angle rescues. - Page 101.*
7. **B) Maintain manual stabilization of the head** - *Cervical collars will only minimize movement of the neck on a cooperative patient. The rescuer at the head should maintain manual stabilization of the head even after placement of the cervical collar. - Page 103.*
8. **B) An air passage to the lungs** - *The trachea is an air passage to the lungs. It is located below the larynx and is commonly called the windpipe. - Page 117.*
9. **C) Only attempt finger sweeps when the patient is unconscious and you can see an object.** – *Probing the mouth with your finger can cause a gag reflex and vomiting which will result in serious injury to the patient. - Page 137.*
10. **B) determine if there is a complete obstruction or partial and ask “are you choking? or Can you speak?.** - *Page 132.*

11. **C) Take BSI precautions** – Always take BSI precautions before performing any first aid or procedure. - Page 139.
12. **D) Scene size-up** - Determining the total number of patients is a major component of the scene size-up. Try to determine the number of patients before making patient contact. The total number of patients will determine what additional resources are needed at the scene. - Page 157.
13. **C) With the information you receive from dispatch before you arrive on site** – Scene safety and size up starts from the information you receive before you get to the accident scene. Think about the possible safety hazards while en route and patients possible injuries and treatments. - Page 163.
14. **C) Assessment of the scene and mechanism of injury** - Categorization of the patient as being injured (trauma) is based primarily on the scene findings and the mechanism of injury. These two components of scene size-up provide the preliminary information that allows you to categorize the patient to medical or trauma and determine priority of care. - Page 161.
15. **B) Painful** - AVPU is a measurement used to determine responsiveness and it stands for Alert, Verbal, Painful, Unresponsive. - Page 170.
16. **A) Perform a rapid physical exam, take vital signs, gather patient history** – unresponsive medical patients require immediate treatment and should be transported as soon as possible. A rapid physical exam is a quick head to toe assessment. - Page 177, 178
17. **D) Liver abnormalities** – Yellow or jaundiced skin indicates the liver is not functioning normally. - Page 189.
18. **B) Semi automated** - Semi-automated requires the rescuer to press a button to deliver shock once the AED has determined a shockable rhythm. - Page 232.
19. **D) Asystole** - in situations where there is no electrical activity in the heart-a condition called asystole or (flatline)-AED's will not be effective. - Page 233.
20. **A) After providing two minutes of CPR** – If you are alone with an unresponsive child, provide five cycles of compressions and ventilations (approximately two minutes) and then call 911. The sooner CPR is provided, the greater the chances of survival. - Page 216.
21. **C) Adequate breathing is easy and effortless** – and it is sufficient to support life. – Page 259.
22. **C) Cerebrovascular accident** - A cerebrovascular accident or CVA is also known as a stroke. - Page 265.
23. **A) Hypoglycemia** – develops over a period of minutes of a few hours as a result of “insulin shock” from too much insulin, low blood sugar and overexertion. - Page 271.

24. **D) Brachial artery** - *The brachial artery in the upper arm is used for controlling bleeding in the arm. - Page 313.*
25. **B) Maintain an open airway and control bleeding.** - *Page 346.*
26. **A) When a bone is broken, chipped cracked or splintered** - *A fracture is referred to when a bone is broken, chipped, cracked or splintered. - Page 375.*
27. **D) All of the above** - *Distal circulation, sensation and motor function should be checked before and after splinting. The fingers and toes must be exposed in order to monitor these functions. - Page 383.*
28. **A) True** - *Bulky dressings or a small pillow that is soft and lightweight will immobilize the flail chest to prevent further injury to the internal organs. - Page 426.*
29. **D) All of the above**- *Burns to the hands, feet, face, groin, buttock, thighs and major joints are considered serious. Any burn that encircles a body part and burns greater than 15 percent of the patient's body is very serious. - Page 357.*
30. **A) Ingestion, inhalation, absorption, injection** - *Route of exposure to poisons can enter the body in several ways. They are ingestion, inhalation, absorption and injection. - Page 274.*