

2011 North Central Regional Mine Rescue Contest
Wilmington, Illinois
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. Supine refers to the body lying face down.
 - a. True
 - b. False*

2. The human body has _____ major body cavities.
 - a. Two
 - b. Four*
 - c. Six
 - d. Eight

3. The body has five regions consisting of:
 - a. Head, Neck, Torso, Upper Extremities, and Lower Extremities*
 - b. Head, Neck, Abdominal, Upper Extremities, and Lower Extremities
 - c. Head, Thoracic, Abdominal, Upper Extremities, and Lower Extremities
 - d. None of the above

4. Which internal organ(s) lie partially and/or entirely behind the abdominal cavity membrane?
 - a. Kidneys
 - b. Kidneys and Liver
 - c. Liver and Pancreas
 - d. Kidneys and Pancreas*

5. When moving elderly patients extra caution is necessary since they may have_____:

- a) Limited range of motion
- b) Brittle bones
- c) All of the above*
- d) None of the above

~~6. When breathing is inadequate or stops carbon monoxide accumulates in the body cells. The victim is becoming _____.~~

- a. Unrespirable
- b. Cyanotic
- c. Hypoxic*
- d. None of the above

7. When the diaphragm muscle contracts it moves _____.

- a. Upward.
- b. Downwards.*
- c. In all directions.
- d. None of the above

8. A common problem with assisted ventilation is overinflating the lungs or breathing too quickly that will force air in the stomach, which is commonly called:

- a. Gastro inflation
- b. Gastric distention*
- c. Abdominal extension
- d. None of the above

9. 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

10. If all methods fail, and you must apply a tourniquet, it's most effective and safest placement location is _____:

- a. one inch from the wound
- b. two inches from the wound*
- c. directly on the wound
- d. None of the above

11. When applying a bandage to a limb, always bandage from the top to the bottom of the limb.

- a. True.
- b. False.*

12. The largest human organ is the lungs.

- a. True
- b. False*

13. Some veins have valves to prevent forward flow of blood.

- a. True
- b. False*

14. As we age the loss of bone strength is commonly referred to as_____.

- a. Osteoarthritis
- b. Osteoporosis*
- c. Skoleosis
- d. None of the above

15. When adjusting a patient's position on a spine board, maintaining the victims head and spine position is commonly referred to as positive alignment.

- a. True
- b. False*

16. The lack of oxygenated blood and nutrients to organs is referred to as____:

- A. Hypertension
- B. Hypoperfusion*
- C. Hypothoracic
- D. Hypovolemic

17. A maintenance worker fell, impaling himself on a steel rod. In a panic he pulls himself free. As you arrive on scene you realize he's suffering from a sucking chest wound. Your emergency care is _____:

- a. Sealing the wound with an occlusive bandage as the patient inhales.
- b. Sealing the wound with an occlusive bandage as the patient exhales.*
- c. Sealing the wound with an occlusive bandage as the patient holds his breath.
- d. None of the above

18. A contractor, installing a conveyor belt, has a wire rope break while it's under tension. The wire rope eviscerating the victim's abdomen, causing his intestines to come out partially. You treat the patient by _____:

- a. Applying direct pressure with a dressing.
- b. Gently pushing his intestines back into his abdomen and apply a dressing.
- c. Covering the intestines with an occlusive dressing and then a warm moist towel.*
- d. None of the above.

19. You've been called to the welding shop for thermal burns when a propane bottle exploded. The patient has 15% of his body burned. You treat the patient by wrapping the wounds with clean moist dressings and caring for shock____:

- a. True
- b. False*

20. A co-worker was opening a box with a utility knife and cuts the end of his finger off. Upon arrival to the scene you locate the missing finger part and _____:

- a. place it in a plastic bag.
- b. wrap it in a dry dressing and place it in a plastic bag.*
- c. wrap it in a moist dressing and place it in a plastic bag.
- d. wrap it in a dry dressing, place it on ice in a cooler and transport it with the patient.

21. A miner was struck in the neck by fly rock and suffering from a neck wound. After applying an occlusive bandage to his wound you then place him on a stretcher so that he's lying on his left side:

- a. True*
- b. False

22. The rule of tens is a system used in determining the amount of skin surface burned.

- a. True
- b. False*

23. A sprain is caused by the overexerting, overworking, overstretching or tearing of a muscle.

- a. True
- b. False*

24. A triangular bandage used to stabilize a elbow and arm is called a ____:

- a. Swathe
- b. Cravat
- c. Sling*
- d. None of the above

25. You arrive at a mine site roll over accident. The victim has suffered a chest injury. Upon examination you've determined he has a "flail chest" since ____:

- a. as he inhales the flail section extends outward from the chest wall.
- b. as he exhales the flail section sinks inward into the chest wall.
- c. as he inhales the flail section sinks inward from the chest wall.*
- d. None of the above.

26. A patient has a simple rib injury. You treat him by ____:

- a. wrapping his chest with a bandage tightly as he exhales.
- b. wrapping his chest loosely with a bandage as he inhales.
- c. applying a swathe and sling such that his hand is positioned across his chest, so that his hand aids in holding his injury in place.
- d. applying a swathe and sling to hold the arm against the injured side of the chest.*

27. The most common signs and symptoms of a spinal injury are_____:
- a. impaired breathing.
 - b. loss of bowels or bladder control.
 - c. weakness, numbness, or tingling sensation or paralysis of arms or legs.
 - d. all of the above.*
28. A roof bolter was struck in the face with a bolt that slipped from the machine. He has traumatic facial injuries. You treat him by _____:
- a. checking for loose, broken teeth.
 - b. stabilizing the head and neck for possible injuries.
 - c. checking for blood or other fluids, blood clots or other obstructions in the airway.
 - d. all of the above*
29. When a skull closed impact injury causes a bruised brain, the bruised portion of the brain is on the same side of the head as the skull impact.
- a. True.
 - b. False*
30. Clear or bloody fluid flowing from the ears and/or nose of a fractured skull injury patient is called _____:
- a. visceral fluid
 - b. cerebrospinal fluid*
 - c. spinal fluid
 - d. None of the above