

2014 Metal/Nonmetal National Mine Rescue Contest

First Aid Competition – Written Test

Answers and Rationales

1. **b) Thoracic** – torso or trunk protect the lungs, heart, great blood vessels, part of the trachea and esophagus and the diaphragm. EMR 9th, Page 64.
2. **d) Respiratory system** – the alveolar sac is located in the lungs which is a part of the respiratory system. EMR 9th, Page 67.
3. **a) Semi-Fowler's position** – means the patient is sitting up at an angle. EMR 9th, Page 61.
4. **a) Mandible** – is the jaw bone located in the head. EMR 9th, Page 72.
5. **a) Urinary system** – The urinary system includes the kidneys, ureters, bladder and urethra. The main function is to move chemical wastes from the body and help balance water and salt in the blood. EMR 9th, Page 76.
6. **d) All of the above** – An extremity lift requires two people and is ideal for moving patients from a chair or stretcher; however, it should not be used if there is a suspected head, neck spine injury or if knee injury or fractures to the extremities are not immobilized. EMR 9th, Page 99.
7. **a) Stair chair** – Are used to transport seated medical patients down stairways and tight places; former name was KEDS. Now some newer models are made of sturdy folding frames and hard plastic seats, have wheels and are easy to store. EMR 9th, Page 105.
8. **b) Three** – the move is ideal with three rescuers but can be carried out with a minimum of two. EMR 9th, Page 108.
9. **d) Interpersonal Communication** – Most often occurs between three or fewer participants who are in close proximity to one another. The main characteristic of good interpersonal communication is that feedback between sender and giver are immediate. EMR 9th, Page 119.
10. **a) True** – heel tilt/chin lift is used for patients with no suspected spinal injury. EMR 9th, Page 141.
11. **b) False** – There is no need to provide rescue breathing to patients who are breathing normally. Rescue breathing is performed on patients not breathing normally with agonal respirations or patients who are not breathing at all. EMR 9th, Page 141.

12. **d) Take BSI precautions or wear appropriate PPE** – Always take BSI precautions before performing any first aid procedure. EMR 9th, Page 143.
13. **d) Tongue** – the tongue is the most common cause of airway obstruction in an unconscious patient. Caused when the tongue falls back in the throat and blocks the airway. EMR 9th, Page 148.
14. **d) Not a hazard** – Oxygen supplied at 15 LPM with a nonrebreather mask delivers 80-95% is method of administration and not a hazard per se. EMR 9th, Page 171, 175.
15. **d) All of the above** – All noted are performed prior to inserting an OPA. EMR 9th, page 156.
16. **c) Chain of Survival** - 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. EMR 9th, page 187.
17. **c) CPR begins** – After the primary assessment when you determine the patient is unresponsive, has gasping breaths and has no pulse. Gasping is called agonal respirations and is inadequate to sustain life. EMR 9th, page 190.
18. **b) Place the heel of one hand on the center of the patient's bare chest, right between the nipples.** EMR 9th, page 193.
19. **c) Give one breath every 5 to 6 seconds** – If the patient has a carotid pulse, but no respirations, provided one breath every 5 to 6 seconds or 10 to 12 breaths a minute. EMR 9th, page 197.
20. **a) True** – a sign is something that can be observed or measured; a symptom is something that the patient complains about or describes.
21. **a) Verbal** – AVPU is a measurement used to determine responsiveness and it stands for Alert, Verbal, Painful, Unresponsive. EMR 9th, Page 221 & 253.
22. **d) Check for carotid pulse** – when a radial pulse cannot be felt, you should check for a carotid pulse in the neck. Often when there is no radial pulse, the patient has a carotid pulse. The lack of a radial pulse may indicate low blood pressure or an injury to the extremity that is interrupting blood flow. Always confirm there is no carotid pulse before beginning CPR. EMR 9th, page 225.
23. **a) Grasp the patient's wrist as if you were going to count the pulse rate** – this should be done first when trying to assess breaths because many patients will alter their respiratory rate when someone is watching them breathe. EMR 9th, Page 223.

24. **a) Shock time** – *The time it takes from reaching the patient until the first shock is delivered. EMR 9th, Page 207.*
25. **c) That which is vital to the continuation of life** – *Vital signs include five specific signs; skin signs, respiration, pulse, blood pressure and pupils. EMR 9th. Page 221.*
26. **c) Myocardial infarction** – *“Myo” meaning muscle and “cardial” meaning heart, “infarction” meaning deadening of tissue due to loss of adequate blood supply. EMR 9th, Page 278.*
27. **d) All of the above** – *PCC’s are staffed 24 hours per day and the hotline number is 1-800-222-1222; if rescuers forget the number they can contact 911 dispatch who will contact the PCC. EMR 9th, Page 317.*
28. **b) Perform a scene size-up** – *Always performs a scene size-up regardless of the scene. When responding to behavioral emergencies, perform a scene size-up to determine if law enforcement may be needed. EMR 9th, Page 327.*
29. **a) One** – *An MCI is any emergency with more than one patient or victim. EMR 9th, Page 584.*
30. **d) All of the above** – *triage identifies patients of varying injuries including death to separate those patients into groups and use available resources to provide care to those in immediate need. EMR 9th Page 588.*