Instructions to Candidates

This 25-question exam is designed to assess your base knowledge of trauma care. It is written for all levels of EMTs and prehospital providers. There are some questions that the correct answer may be an advanced procedure that the basic-level provider is unable to perform due to system protocols or training levels. It is assumed that any provider who is taking the PHTLS course, regardless of level of training, will understand and recognize the need for an ALS procedure, even if they are not authorized to do so. To this end, the basic provider should select the ALS answer if appropriate and not deem it incorrect because the procedure cannot be performed by a basic provider.
1) Your EMS unit is en route to the scene of an assault. Dispatch information indicates law enforcement has not yet arrived on the scene. The safest approach to this situation is:

A) Staging at the scene so that you can advise dispatch of the nature of the patient's injuries
B) Arriving on scene but staying inside the vehicle until law enforcement advises the scene is safe
C) Staging at a safe location away from the scene until law enforcement advises the scene is safe
D) Arriving on scene and initiating care, as long as bystanders confirm the assailant is no longer there

2) Which is a sign of ventilatory inadequacy in a trauma patient?

A) Equal breath sounds
B) Ventilatory rate of 12
C) Speaking in short bursts
D) SpO2 of 95% on room air

3) During the primary survey of a trauma patient, you note that the patient is agitated and confused and appears to have multiple injuries from an altercation. Of the following choices, your first treatment priority should be:

A) Controlling all bleeding
B) Establishing an intravenous line
C) Correction of possible hypoxia
D) Full immobilization to a backboard

4) Which is the most common cause of upper airway obstruction in the trauma patient?

A) Teeth
B) Blood
C) Tongue
D) Vomitus

5) Which is the most significant complication of prolonged suctioning of trauma patients?

A) Hypoxia
B) Bradypnea
C) Bradycardia
D) Hypercarbia
6) Which is the most important reason to maintain an open airway in the trauma patient?

A) To prevent snoring respirations
B) To prevent aspiration and pneumonia
C) To prevent hypoxemia and hypercarbia
D) To prevent the tongue from blocking the pharynx

7) Your patient is a middle-aged male who crashed his motorcycle. He is unresponsive. After opening the airway using a modified jaw thrust, you note the patient has snoring respirations at a rate of 6. Auscultation reveals breath sounds are absent on the left side. The next intervention should be to:

A) Insert an endotracheal tube
B) Apply a nonrebreather mask
C) Begin ventilation with a BVM
D) Perform a needle decompression

8) Hypotension of unknown etiology in a trauma patient should be assumed to result from:

A) Blood loss
B) Spinal injury
C) Cardiac tamponade
D) Tension pneumothorax

9) Hypotension in the healthy adult initially occurs with what percent of blood loss?

A) Less than 15%
B) 15% to 30%
C) 31% to 40%
D) More than 40%

10) Medication used by trauma patients for preexisting conditions may cause which of the following?

A) Herbal preparations may enhance blood clotting.
B) Anti-inflammatory agents may enhance blood clotting.
C) Beta blockers may prevent tachycardia with blood loss.
D) Calcium channel blockers may slow the onset of shock.
11) Your patient is a 20-year-old male who struck his head on a teammate’s knee while diving to catch a football. He was not wearing a helmet. He demonstrates decerebrate posturing and has a GCS score of 4. His heart rate is 58, blood pressure is 180/102, and his left pupil is dilated. What is the best ventilation rate to use when managing this patient?

A) 10 breaths per minute  
B) 20 breaths per minute  
C) 30 breaths per minute  
D) 35 breaths per minute

12) The most common cause of injury in pediatric patients less than 10 years of age is:

A) Falls  
B) Burns  
C) Penetrating injuries  
D) Motor vehicle collisions

13. An 18-year-old female was struck by a car and has sustained an apparent left femur fracture. Communication with her is hampered because she only speaks a foreign language. Which finding, by itself, does not mandate immobilization of the cervical spine?

A) Mechanism of injury  
B) Fracture of the femur  
C) Inability to communicate  
D) Tenderness over the cervical spine

14) Referencing the Parkland formula, what percent of the calculated IV volume should be administered in the first 8 hours following the injury?

A) 10%  
B) 25%  
C) 33%  
D) 50%

15) Specific signs of inhalation injury include:

A) Burns  
B) Wheezing  
C) Tachycardia  
D) Hypotension
16) The preferred prehospital wound management for a patient with a 36% body surface area flame burn is:

A) Elastic bandages
B) Topical ointments
C) Dry sterile dressings
D) Cool moist dressings

17) The most immediate life-threatening condition resulting from injury to solid abdominal organs is:

A) Peritonitis
B) Hemorrhage
C) Multiple organ failure
D) Acute respiratory failure

18) You arrive at the scene of a motor vehicle collision in which a vehicle struck a tree. Which is the best indicator of potential injury?

A) Height of the tree
B) Mass of the vehicle
C) Speed of the vehicle
D) Circumference of the tree

19) Which is the most important indicator of a serious injury in a victim of a shotgun wound?

A) The position of the victim when shot with the gun
B) The total weight of the projectile shot from the gun
C) Distance between the victim and the gun when shot
D) Velocity of the projectile leaving the gun when shot

20) Which best describes an injury caused by shearing forces?

A) Liver damage due to a gunshot wound
B) Aortic tear due to sudden deceleration
C) Bilateral leg amputation due to pedestrian/train collision
D) Pelvic fracture due to posterior displacement of the femur

21) Bilateral femur fractures are most often associated with which type of motorcycle crash?

A) Rear impact
B) Angular impact
C) Head-on impact
D) Bike-road impact
22) Severe injuries should be suspected when a patient falls from a height of _____ times his or her height or greater.

A) two  
B) three  
C) four  
D) five

23) Which is the preferred adjunct device for verifying placement of an endotracheal tube in a patient with a perfusing rhythm?

A) Stethoscope  
B) Pulse oximeter  
C) Esophageal detector device  
D) End-tidal CO₂ monitoring (capnography)

24) The target blood pressure for a trauma patient with suspected intraabdominal hemorrhage is:

A) 60 – 70 mm Hg  
B) 80 – 90 mm Hg  
C) 100 – 110 mm Hg  
D) 120 – 130 mm Hg

25) Which best explains the mechanism by which gas exchange is impaired in pulmonary contusion?

A) Blood in the alveoli  
B) Collapse of the alveoli  
C) Compression of the lung tissue  
D) Partial occlusion of the bronchi