MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) To gain an appreciation for the potential for trauma from high-velocity projectiles, it is important to remember that the shock wave produced can exceed atmospheric pressure by up to ________ times.
   A) 25  B) 100  C) 80  D) 50

2) Which of the following increases a bullet’s profile?
   A) Tumbling 180 degrees upon impact
   B) The use of rifling in the barrel of the firearm
   C) "Mushrooming" on impact
   D) A and C

3) Which of the following statements about entrance and exit wounds is true?
   A) Cavitation wave energy is greatest at a bullet’s point of entrance.
   B) Exit wounds reflect the potential for damage more accurately than entrance wounds.
   C) Entrance wounds most often appear as stellate.
   D) Exit wounds are usually the size of the bullet’s profile.

4) Which of the following is typical of the trajectory of a knife when a female assailant stabs someone?
   A) The movement is downward as the assailant raises the knife and swings downward.
   B) The trajectory is lateral: right to left if she is right handed and left to right if she is left handed.
   C) The movement is upward as the assailant drives upward with the knife.
   D) The trajectory tends to be in a horizontal plane at the level of the assailant’s shoulder.

5) Which of the following organs would most likely be injured by a stab wound to the 6th intercostal space in the midaxillary line on the right side?
   A) Stomach, pancreas, lung
   B) Liver, bladder, kidney, small intestine
   C) Spleen, diaphragm, lung, kidney
   D) Liver, diaphragm, lung, kidney

6) Which of the following statements is true of the permanent cavity created by penetrating trauma?
   A) It fills with disrupted tissues, some air, fluid, and debris.
   B) It is a space created by a projectile as tissue moves rapidly away on its path.
   C) It is the damage done when the projectile fragments penetrate.
   D) It is a potential space, not an actual space.

7) As the mass of an object increases, which of the following occurs?
   A) The amount of energy increases.
   B) The amount of energy decreases.
   C) The maximum speed it can attain decreases.
   D) The maximum speed it can attain increases.
8) Which of the following is true of the shock wave that accompanies high-velocity penetrating trauma?
   A) Elastic tissues are less tolerant of the stress than nonelastic tissues.
   B) The shock wave may be transmitted through blood, resulting in damage to blood vessels some distance from the primary wound.
   C) Hollow organs are less tolerant of the stress than solid organs are.
   D) Shock waves cause no injury to surrounding tissues; they only momentarily disrupt function.

9) Which of the following is NOT considered penetrating trauma?
   A) A laceration on the forehead as a result of being struck with a metal pipe
   B) Receiving a wood splinter in the foot while walking on an unfinished deck
   C) A laceration from a kitchen knife
   D) A superficial wound resulting from a pellet from a pellet gun being lodged under the skin

10) Which of the following characteristics of stab wounds is associated with a male attacker?
    A) The trajectory is forward and down.
    B) The victims usually have defensive wounds on their forearms.
    C) The injuries are solely to the extremities.
    D) The trajectory is overhand and downward.

11) Which of the following is considered a high-velocity weapon?
    A) Rifle
    B) Arrow
    C) Handgun
    D) Shotgun

12) As the energy from a medium or high-velocity projectile pushes tissue from its path, which of the following occurs?
    A) Damage depends on the net difference between pressure at the entrance wound and pressure at the exit wound.
    B) Negative pressure is generated inside the cavity, drawing debris into the wound.
    C) There is no vacuum created when there is both an entrance and an exit wound.
    D) There is negative pressure at the entrance wound and positive pressure at the exit wound.

13) If you were to design a bullet to have the highest energy exchange, what would you do?
    A) Design the bullet to become more unstable
    B) Decrease the drag
    C) Decrease the bullet’s trajectory
    D) Increase the caliber

14) The path a projectile follows during a flight is called its:
    A) cavity.
    B) drag.
    C) ballistics.
    D) trajectory.

15) The pathway of injury left in the wake of a penetrating mechanism of injury is called the:
    A) cavity.
    B) cone of injury.
    C) trajectory.
    D) profile.

16) As a bullet tumbles, its potential to inflict damage:
    A) increases.
    B) decreases.
    C) remains the same.
    D) is determined by the trajectory.
17) Which of the following is true of the temporary cavity formed by penetrating trauma?
A) It is the damage when the projectile fragments.
B) It is a space indirectly created by a projectile as tissue moves rapidly away from its path.
C) It fills with disrupted tissues, some air, fluid, and debris.
D) It heals more slowly than the permanent cavity.

18) When assessing someone with a gunshot wound from a rifle, which of the following is important to remember?
A) The zone of injury is larger than that expected with other types of weapons.
B) The cavitation is limited to the direct path of the bullet.
C) The trajectory is longer, allowing more energy to be dissipated by drag before it strikes the victim.
D) The muzzle velocity is less than that of a handgun.

19) Which of the following is associated with assault rifle wounds but not hunting rifle wounds?
A) Multiple wounds
B) Permanent cavitation
C) Smaller exit wounds
D) Larger exit wounds

20) Which of the following statements about bullets is true?
A) A small, light bullet does the most harm.
B) The larger the bullet the smaller its energy.
C) A high-velocity bullet is three times less likely to do major harm.
D) The hunting rifle’s bullet is usually a lighter bullet, but it travels faster.

21) Which of the following statements about rifles is true?
A) Assault rifles do not accept domestic hunting ammunition and thus create a projectile profile that is smaller and causes less damage.
B) Assault rifles generally increase the number of wounds the victim sustains.
C) Hunting rifles have larger magazines and operate semiautomatically.
D) Assault rifles have greater velocity than hunting rifles and only operate automatically.

22) When assessing a patient with a gunshot wound to the chest, which of the following findings would tell you the most about the amount of damage?
A) A large exit wound
B) A stellate entrance wound
C) Diminished breath sounds unilaterally
D) Subcutaneous emphysema

23) Which of the following organs is most susceptible to damage from the pressure wave when a bullet enters it?
A) Intestines
B) Femoral artery
C) Lungs
D) Liver

24) Which of the following abdominal organs is the least affected by the pressure wave associated with penetrating trauma?
A) Bowel
B) Spleen
C) Kidneys
D) Liver

25) Which statement about ballistics is true?
A) Damage is less when the bullet does not exit the body.
B) In penetrating trauma, the mass of a projectile is more significant than its velocity when determining kinetic energy.
C) When a bullet yaws, it increases the damage.
D) When a bullet tumbles, it decreases the damage.
Answer Key
Testname: PCARE CH 18, QUIZ

1) B  Diff: 1  Page Ref: 810  Objective: 10
2) D  Diff: 2  Page Ref: 806  Objective: 10
3) B  Diff: 2  Page Ref: 815  Objective: 10
4) A  Diff: 2  Page Ref: 811  Objective: 10
5) D  Diff: 2  Page Ref: 817  Objective: 10
6) A  Diff: 1  Page Ref: 810  Objective: 10
7) A  Diff: 1  Page Ref: 803  Objective: 6
8) B  Diff: 2  Page Ref: 810  Objective: 10
9) A  Diff: 2  Page Ref: 803  Objective: 10
10) B  Diff: 2  Page Ref: 811  Objective: 10
11) A  Diff: 2  Page Ref: 807  Objective: 10
12) B  Diff: 2  Page Ref: 809  Objective: 10
13) A  Diff: 2  Page Ref: 804  Objective: 10
14) D  Diff: 1  Page Ref: 804  Objective: 10
15) A  Diff: 1  Page Ref: 809  Objective: 10
16) A  Diff: 1  Page Ref: 804  Objective: 10
17) B  Diff: 1  Page Ref: 810  Objective: 10
18) A  Diff: 2  Page Ref: 807  Objective: 10
19) A  Diff: 2  Page Ref: 808  Objective: 10
20) A  Diff: 2  Page Ref: 803  Objective: 10
21) B  Diff: 2  Page Ref: 808  Objective: 10
22) A  Diff: 3  Page Ref: 815  Objective: 10
23) D  Diff: 2  Page Ref: 810  Objective: 10
24) A  Diff: 2  Page Ref: 810  Objective: 10
25) C  Diff: 2  Page Ref: 804  Objective: 10