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

1) Which of the following stages of burn injury is best described as including a pain response, an
outpouring of catecholamines, tachycardia, tachypnea, mild hypertension, and anxiety?
   A) Hypermetabolic
   B) Resolution
   C) Emergent
   D) Fluid shift

2) Which type of radiation particle can travel through 6-10 feet of air, penetrate a few layers of
   clothing, and cause external and internal injuries?
   A) Alpha
   B) Neutron
   C) Beta
   D) Gamma

3) Most inhalation injuries in burn patients are due to which of the following?
   A) Thermal burns of the lower airway
   B) Thermal burns of the upper airway
   C) Toxic inhalation
   D) Radiation burns of the airway

4) The three primary factors that determine the severity of radiation are:
   A) duration, distance, and shielding.
   B) duration, shielding, and dose.
   C) distance, shielding, and symptoms.
   D) dose, symptoms, and shielding.

5) Which of the following best describes the pathophysiology of most burns to the human body?
   A) Chemicals cause an endothermic reaction that destroys tissue.
   B) The skin, and sometimes deeper tissues, are destroyed through combustion.
   C) Radiation, including solar radiation and radiant heat, alters cell structures.
   D) Heat causes evaporation of water and denatures protein.

6) Which of the following has contributed most significantly to the decline in U.S. burn mortality?
   A) Visits to elementary schools by firefighters
   B) Paramedic involvement in public education
   C) Improved building codes and construction and sprinkler and smoke detector use
   D) Public service announcements on radio, television, and billboards

7) You have been dispatched to a call for a burn patient. Upon arriving, you find a 23-year-old
   female who was sunbathing and fell asleep. She is alert and oriented and in moderate pain. She has
   blisters covering her extremities, abdomen, face, and chest. This patient's burns fall into which of
   the following categories?
   A) Moderate
   B) Superficial
   C) Critical
   D) Minor

8) The voltage of a bolt of lightning may be as much as _______ volts, and its temperature may reach
   _______ degrees Fahrenheit.
   A) 50,000, 100,000
   B) 100,000, 50,000
   C) 150,000, 5,000
   D) 5,000, 150,000

9) Which of the following factors increases the criticality of burn injuries?
   A) Being in the pediatric or geriatric age group
   B) Cardiovascular disease
   C) Coexistent trauma, such as fractures or damage to internal organs
   D) All of the above
10) Which of the following burns would be classified as a moderate one?
   A) Superficial < 50% BSA       B) Partial-thickness < 30% BSA
   C) Full thickness < 2% BSA     D) Partial-thickness > 30% BSA

11) Your patient is a 23-year-old female who was rescued from a burning house. She was asleep in a back bedroom when the fire started, and there was no smoke alarm. During transport, you monitor her EKG and pulse oximetry, as well as her vital signs. She has a pulse oximetry reading of 99% after receiving oxygen by nonrebreathing mask. In which of the following ways is this finding significant?
   A) You can be assured that there was minimal to no inhalation of smoke or toxic gases.
   B) Oxygen has been effective in increasing the saturation of her hemoglobin.
   C) Oxygenation is adequate and no supplemental oxygen is needed.
   D) You cannot rely on this measure alone to assess oxygenation.

12) Which of the following accounts for the most severe thermal burns of the airway?
   A) Inhalation of superheated air
   B) Inhalation of radioactive particles in smoke
   C) Inhalation of toxic gasses
   D) Inhalation of superheated steam

13) You are caring for a patient with 30 percent full- and partial-thickness burns. He is an 80 kg male. According to the Parkland formula, he should receive _______ liters of fluid over 24 hours, with _______ liters infused in the first 8 hours.
   A) 10.6, 5.3       B) 5, 3       C) 8.2, 2       D) 4.5, 1.25

14) An area of burned tissue that is not painful is most likely a _______ burn injury.
   A) full-thickness       B) superficial
   C) semifull-thickness   D) partial-thickness

15) Which of the following agents is indicated for pain control in a patient with 4.5 percent partial-thickness burns?
   A) Paracetamol       B) Fentanyl
   C) Acetaminophen     D) Naproxen sodium

16) You are assessing a 17-year-old male patient with a burn on the lateral aspect of his thigh. Which of the following guidelines is most helpful when estimating the percentage of total body surface area involved?
   A) The Rule of Palms       B) The Parkland Formula
   C) The Rule of Nines       D) The modified pediatric Rule of Nines

17) During which phase of a burn injury does extravasation of proteins, water, and electrolytes occur, resulting in edema and potential hypovolemia?
   A) Hyperemia       B) Fluid shift
   C) Emergent       D) Hypermetabolic

18) Based on total body surface area and burn depth, you have determined that an 88-year-old female has a moderate burn. Considering the age of the patient, you should consider this burn:
   A) minor.       B) critical.       C) moderate.       D) fatal.
19) Alkalis generally cause _______ extensive burns because they result in _______ necrosis of the tissue.
   A) more, coagulation  
   B) less, coagulation  
   C) more, liquefaction  
   D) less, liquefaction

20) The first step for treating a patient who has been contaminated with dry lime is to:
   A) neutralize the lime with a mild acidic solution, such as vinegar and water.  
   B) flush the skin with large amounts of isopropyl alcohol.  
   C) brush away as much of the powder as possible.  
   D) flush with copious amounts of tepid water.
Answer Key
Testname: PCARE, CH 21 W-KEY QUIZ

1) C
   Diff: 1  Page Ref: 893
   Objective: 3

2) C
   Diff: 1  Page Ref: 897
   Objective: 54

3) C
   Diff: 1  Page Ref: 900
   Objective: 24

4) A
   Diff: 2  Page Ref: 900
   Objective: 51

5) D
   Diff: 1  Page Ref: 892
   Objective: 3

6) C
   Diff: 1  Page Ref: 892
   Objective: 2

7) C
   Diff: 2  Page Ref: 911
   Objective: 7

8) B
   Diff: 1  Page Ref: 916
   Objective: 45

9) D
   Diff: 1  Page Ref: 912
   Objective: 2

10) B
    Diff: 2  Page Ref: 911
    Objective: 7

11) D
    Diff: 2  Page Ref: 914
    Objective: 13

12) D
    Diff: 1  Page Ref: 902
    Objective: 24

13) A
    Diff: 2  Page Ref: 913
    Objective: 13

14) A
    Diff: 1  Page Ref: 903
    Objective: 5

15) B
    Diff: 1  Page Ref: 914
    Objective: 13

16) A
    Diff: 1  Page Ref: 904
    Objective: 6

17) B
    Diff: 2  Page Ref: 894
    Objective: 3

18) B
    Diff: 2  Page Ref: 911
    Objective: 7

19) C
    Diff: 2  Page Ref: 896
    Objective: 33

20) C
    Diff: 1  Page Ref: 917
    Objective: 38