1. Which of the following statements concerning a patient who received electrical burns to his hand after grabbing a live wire is true?

1. The burning will continue for hours, perhaps days.
2. The patient will remain an electrocution hazard to rescuers for several minutes after being removed from the source of electricity.
3. The extent of tissue damage may be much greater than it appears on the surface.
4. Inhalation of gases is dangerous.

Answer: c

Objective: 19-5

Reference: 589

2. Your patient is a 35-year-old woman who spilled a cup of hot coffee on herself two hours ago. An area on her right thigh that is about twice the size of the palm of her hand is red and painful but has no blisters. Which of the following actions would be appropriate for an OEC Technician to take?

1. Apply a lotion containing a topical anesthetic and aloe vera.
2. Apply a dry sterile dressing.
3. Apply an antibiotic ointment.
4. Apply a plastic bag full of ice to the skin of the affected area.

Answer: b

Objective: 19-3

Reference: 592

3. Your patient is a 40-year-old man who was burned when he spilled gasoline on his pants while he was standing near the pilot light of his hot-water heater. He has partial thickness burns from his feet to just above his knees, circumferentially around both legs. According to the Rules of Nines, the man burned \_\_\_\_ of his body surface.

1. 9 percent
2. 4.5 percent
3. 36 percent
4. 18 percent

Answer: d

Objective: 19-6

Reference: 589–590

4. Which of the following patients should be cared for in a burn center?

1. A 16-year-old female who has a 2-inch wide full-thickness burn on her leg from coming in contact with a motorcycle exhaust pipe
2. A 30-year-old woman who has deep partial-thickness burns on her hand and arm as a result of spilling hot cooking oil on herself
3. A 12-year-old boy with a superficial partial-thickness burn on his forearm as a result of making a torch by lighting aerosol from a can of hairspray
4. A 45-year-old man who has a full-thickness burn about 3 inches long by ½ inch wide on his posterior arm from backing into a barbecue grill

Answer: b

Objective: 19-3

Reference: 590

5. Which of the following sentences best describes a partial-thickness burn?

1. The skin is red and moist, and blisters have formed.
2. The skin is charred or blackened and lacks sensation.
3. The skin is red, but dry and painful.
4. The skin is white and dry with no sensation of pain.

Answer: a

Objective: 19-3

Reference: 586

6. Your patient is a 10-year-old boy who was exposed to a dry chemical powder and is complaining of severe pain at the site of contact on both of his hands. There is no decontamination shower on site. Which of the following actions would be the best way to manage this situation?

1. Brush away as much of the powder as possible and then have the patient hold his hands under running water from a faucet or garden hose.
2. Have the fire department connect to a hydrant and spray the patient down from head to toe.
3. Brush away as much powder as possible and then pour a bottle of sterile saline solution over the patient’s hands.
4. Brush away the powder and then bandage the patient’s hands in a position of function.

Answer: a

Objective: 19-7

Reference: 594

7. Your patient is a 25-year-old man who has a reddened area with blisters across the palm of his hand after grabbing the handle of a very hot iron skillet. Which of the following actions must be avoided in the prehospital management of this wound?

1. Applying a dry, sterile dressing
2. Cooling the burn with cool water
3. Applying an antibiotic ointment
4. Elevating the wound above the level of the heart

Answer: c

Objective: 19-7

Reference: 592

8. A burn extending into the subcutaneous layer would be classified as a:

1. deep partial-thickness burn.
2. superficial burn.
3. superficial partial-thickness burn.
4. full-thickness burn.

Answer: d

Objective: 19-3

Reference: 586

9. The largest organ of the human body is the:

1. large intestine.
2. liver.
3. small intestine.
4. skin.

Answer: d

Reference: 579–580

Objective: Supplemental

10. The top two layers of the skin are the:

1. epidermis and the dermis.
2. subcutaneous and the dermis.
3. epidermis and the cortex.
4. epidermis and the folic.

Answer: a

Objective: Supplemental

Reference: 581

11. Thermal burns:

1. are the least common type of burns.
2. are the most common type of burns.
3. result from tanning beds.
4. result from exposure to Gamma radiation.

Answer: b

Objective: 19-1

Reference: 581

12. Chemical burns result from exposure to:

1. molten tar.
2. steam.
3. hot light bulbs.
4. caustic substances.

Answer: d

Objective: 19-1

Reference: 582

13. The most serious chemical burns could result from exposure to a solution with a pH of:

1. 7.
2. 9.
3. 6.
4. 13.

Answer: d

Objective: 19-1

Reference: 582

14. Electrical injuries produce severe external and internal injuries because:

1. the skin is a poor conductor with a high resistance, and blood vessels are good conductors with low resistance.
2. both the skin and blood vessels are good conductors with low resistance.
3. the skin is a good conductor with a high resistance, and blood vessels are good conductors with low resistance.
4. skin is a poor conductor with a low resistance, and blood vessels are good conductors with low resistance.

Answer: a

Objective: 19-1

Reference: 583

15. Thermal burns result from:

1. transmitted Gamma radiation.
2. direct contact between a heat source and the skin.
3. indirect contact between a heat source and the skin.
4. a chemical reaction stimulated by a heat source.

Answer: b

Objective: 19-1

Reference: 581

16. Which of the following substances cause the most serious chemical burns?

1. An acid with a pH of 1
2. A chemical with a pH of 7
3. An alkaline chemical or base with a pH of 8
4. An acid with a pH of 6

Answer: a

Objective: 19-1

Reference: 582

17. When treating electrical burns, OEC Technicians should always:

1. use moist dressings.
2. use antibiotic ointments.
3. look for internal injuries.
4. use a topical ointment on the skin.

Answer: c

Objective: 19-7

Reference: 583

18. Three types of natural radiation are:

1. alpha, beta, and gamma.
2. alpha, delta, and gamma.
3. beta, delta, and gamma.
4. alpha, beta, and delta.

Answer: a

Objective: Supplemental

Reference: 584

19. Hoarseness or voice changes in a burn patient should alert an OEC Technician that the:

1. patient may be extremely anxious about the injury.
2. heat source may have extended internally into the airway.
3. patient should be treated as a pediatric patient.
4. patient has altered mental status.

Answer: b

Objective: 19-4

Reference: 588

20. Alternating current—current that pulses 60 times per second—is more dangerous than direct current because the pulses:

1. cause external injuries.
2. produce higher amperage.
3. create higher voltage.
4. can cause the victim to remain in physical contact with the source of the current for a longer time.

Answer: d

Objective: 19-5

Reference: 583

21. According to the Rule of Nines, the percentages of total body surface area that are taken up by the heads (front and back) of adults and children are:

1. 9 percent and 18 percent, respectively.
2. 4.5 percent and 9 percent, respectively.
3. 18 percent and 36 percent, respectively.
4. the same.

Answer: a

Objective: 19-6

Reference: 589–590

22. Another simple method for estimating the total percentage of area burned is the \_\_\_\_\_\_ approach.

1. fist
2. three-finger
3. palm
4. ruler

Answer: c

Objective: 19-6

Reference: 590

23. When treating a patient exposed to strong acids or bases, which of the following devices offers the *least* protection to an OEC Technician?

1. A face shield
2. An apron
3. Goggles
4. Exam gloves

Answer: d

Objective: 19-7

Reference: 591

24. In treating a burn patient, you should cool and irrigate the burned tissue with:

1. room-temperature tap water for 15 minutes.
2. chilled tap water for 5 minutes.
3. tap water warmed to 102 degrees F for 15 minutes.
4. tap water warmed to 95 degrees F for 10 minutes.

Answer: a

Objective: 19-7

Reference: 592, 594

25. When treating a patient burned by a dry chemical, it is important to brush away any dry residue before flushing with water because:

1. flushing will expose other areas around the burn.
2. some dry chemicals are activated by water.
3. a containment area needs to be set up to catch the runoff water.
4. flushing will cause the skin’s pores to open.

Answer: b

Objective: 19-7

Reference: 594