

## Chapter 1 The Injury Response Process

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_ 1. Which is an accurate statement regarding the effect of modalities and the healing process?
- A. Modalities attempt to provide the optimal environment for healing to occur.
  - B. Most modalities can speed up the healing of an injury.
  - C. Modality devices are primarily used to alter the body's psychological status to provide a good healing environment.
  - D. The stage of the healing process does not influence which modality is used.
- \_\_\_ 2. According to the physical stress theory, what changes will result from a physical stress that is categorized as none to low?
- A. Cell death
  - B. Decreased tolerance
  - C. Increased tolerance
  - D. Injury
- \_\_\_ 3. What type of tissue is devoid of blood vessels and is able to secrete and absorb various substances?
- A. Epithelial
  - B. Muscle
  - C. Adipose
  - D. Connective
- \_\_\_ 4. According to the general adaptation syndrome, what is the correct order of the three stages of stress response?
- A. Alarm, resistance, exhaustion
  - B. Resistance, alarm, excitement
  - C. Exhaustion, excitement, alarm
  - D. Resistance, exhaustion, excitement
- \_\_\_ 5. What segment of a neuron is responsible for transmitting impulses toward the nerve body?
- A. Dendrites
  - B. Axons
  - C. Electrical synapses
  - D. Chemical synapses
- \_\_\_ 6. What is the longest stage of the general adaptation syndrome?
- A. Alarm
  - B. Resistance
  - C. Exhaustion
  - D. Excitement
- \_\_\_ 7. In what tissue order must the different forms of therapeutic energy pass through to affect the target tissues?
- A. Epithelial, adipose, muscular, nervous, connective
  - B. Epithelial, nervous, adipose, muscular, nervous
  - C. Epithelial, connective, nervous, muscular, adipose
  - D. Epithelial, adipose, connective, muscular, nervous
- \_\_\_ 8. What type of tissue is the most abundant in the body?
- A. Epithelial
  - B. Muscle

- C. Adipose
  - D. Connective
- \_\_\_ 9. During the healing process, when do you see the formation of granulation tissue and the migration of phagocytes and fibroblasts to the injured area?
- A. Acute inflammatory response
  - B. Proliferation phase
  - C. Maturation phase
  - D. Chronic inflammatory response
- \_\_\_ 10. In order to maximize the effect of gravity on the venous return system, a limb should be placed at a \_\_\_\_\_ to the heart.
- A. 0 degree or horizontal angle
  - B. 90 degree angle above horizontal
  - C. 30 degree angle above horizontal
  - D. 60 degree angle above horizontal
- \_\_\_ 11. What type of afferent peripheral nerve is a muscle spindle?
- A. Ia
  - B. Ib
  - C. II
  - D. III
- \_\_\_ 12. What neurotransmitter is located in the brainstem and will increase blood pressure and cardiac output?
- A. Dopamine
  - B. Epinephrine
  - C. Norepinephrine
  - D. Serotonin
- \_\_\_ 13. There are three potential outcomes of the injury process. What best describes the regeneration outcome?
- A. The original tissue is replaced with scar tissue.
  - B. The structure's original structure and function is lost.
  - C. The structure retains some or all of its original structure and function.
  - D. Dead cells and cellular debris are removed by phagocytosis.
- \_\_\_ 14. What type of exudate is a plasma-rich fluid that is especially high in plasma protein?
- A. Fibrinous
  - B. Serous
  - C. Purulent
  - D. Ulcer
- \_\_\_ 15. Application of which modality will result in the greatest rate of femoral vein flow?
- A. Passive straight-leg raises
  - B. Anatomic continuous passive motion
  - C. Pneumatic sleeve
  - D. Active ankle dorsiflexion

### Multiple Response

*Identify one or more choices that best complete the statement or answer the question.*

- \_\_\_ 1. In what tissues are labile cells found? *Select all that apply.*
- A. Bone

- B. Peripheral nervous system
- C. Skin
- D. Intestinal tract
- E. Central nervous system

- \_\_\_\_\_ 2. According to the practical evidence, what are the primary uses for compression wraps? *Select all that apply.*
- A. Increase venous return
  - B. Reduce acute hemorrhage
  - C. Prevent venous pooling
  - D. Reduce secondary cell death
- \_\_\_\_\_ 3. Which events occur during the proliferation phase? *Select all that apply.*
- A. Removal of debris and temporary repair tissue
  - B. Formation of a temporary vascular framework
  - C. Release of histamine to increase cell permeability
  - D. Norepinephrine is released, causing vasoconstriction of arterioles
  - E. Collagen aligns and attempts to adapt to the preinjury orientation
- \_\_\_\_\_ 4. Which of the following represents macrotrauma? *Select all that apply.*
- A. Sprain
  - B. Stress fracture
  - C. Muscle soreness
  - D. Fracture
  - E. Strain
- \_\_\_\_\_ 5. Which of the following characteristics describe type 1 muscle fibers? *Select all that apply.*
- A. Fast twitch
  - B. Slow twitch
  - C. Low intensity
  - D. Aerobic
  - E. Anaerobic

## Chapter 1 The Injury Response Process Answer Section

### MULTIPLE CHOICE

1. ANS: A                   PTS: 1
2. ANS: C                   PTS: 1
3. ANS: A                   PTS: 1
4. ANS: A                   PTS: 1
5. ANS: A                   PTS: 1
6. ANS: B                   PTS: 1
7. ANS: A                   PTS: 1
8. ANS: D                   PTS: 1
9. ANS: A                   PTS: 1
10. ANS: B                   PTS: 1
11. ANS: A                   PTS: 1
12. ANS: A                   PTS: 1
13. ANS: B                   PTS: 1
14. ANS: A                   PTS: 1
15. ANS: A                   PTS: 1

### MULTIPLE RESPONSE

1. ANS: C, D               PTS: 1
2. ANS: B, C               PTS: 1
3. ANS: A, B               PTS: 1
4. ANS: A, D, E           PTS: 1
5. ANS: B, C, D           PTS: 1