



## *CE Credit Package 11*

*22 Credits for \$37<sup>00</sup>*



*Please submit your completed Master Answer Sheet along with payment to*

*AST Member Services*

*6 W. Dry Creek Circle, Suite 200 Littleton, CO 80120*

*Or fax with credit card information to (303) 694-9169.*

*Or scan and e-mail with credit card information to [memserv@ast.org](mailto:memserv@ast.org).*

*Table of Contents*  
*CE Credit Package 11*



**From Concept to Creation: A Look at Drug Discovery, Development and Approval Processes**

**Tonsillectomy and Adenoidectomy 101: Procedure and Implications for the Surgical Technologist**

**Advance Directives**

**Ulnar Collateral Ligament Reconstruction – A Look Inside Tommy John Surgery**

**Obesity: An American Epidemic**

**The Role of the Surgical Technologist in Wound Management**

**Maintaining Patient Confidentiality HIPAA Compliance**

**An Exercise in Personal Exploration: Maslow's Hierarchy of Needs**

**A Surgical Cure for Chronic Blushing: Endoscopic Thoracic Sympathectomy**

**Bilateral Total Modified Radical Mastectomy and Reconstruction**

**In-Office Facial Plastic Surgery: Autologous Fat Grafting**

**Management and Prevention of Infection in Orthopedic Surgical Procedures**



## Drug Discovery, Development and Approval Process

- The drug sildenafil citrate (Viagra®) was originally developed to treat \_\_\_\_.**
  - Angina
  - Erectile dysfunction
  - Hypertension
  - Glaucoma
- A drug containing active molecules that have never been included in another new drug application is called \_\_\_\_.**
  - A new molecular entity
  - An original compound
  - A unique chemical compound
  - A prototype
- Which is not a principal concept affecting drug interaction?**
  - Onset
  - Peak effect
  - Duration of action
  - Frequency of future doses
- \_\_\_\_ studies encompass the entire process of the drug within the body.**
  - Toxicology
  - Pharmacokinetic
  - Post-clinical
  - Biotransformation
- \_\_\_\_ studies determine the dosage and safety of the drug for human use.**
  - Toxicology
  - Pharmacokinetic
  - Post-clinical
  - Biotransformation
- Toxicology studies are used to determine:**
  - Toxic, side and adverse effects
  - Reversal agents
  - Addictive properties
  - All of the above
- \_\_\_\_ denotes a study when subjects and administrators are unaware of grouping status.**
  - Single blind
  - Double blind
  - Placebo
  - None of the above
- A written plan of action that follows the scientific process is a \_\_\_\_.**
  - Theory
  - Hypothesis
  - Protocol
  - Trial
- Examples of clinical safeguard trials include:**
  - Informed consent
  - Audits
  - Institutional review boards
  - All of the above
- Human trials have \_\_\_\_ phases.**
  - 2
  - 3
  - 4
  - 5

## Drug Discovery, Development and Approval Process- questions cont.

11. The \_\_\_ contains all information know about a new drug.
- New drug application (NDA)
  - Food and drug administration (FDA)
  - Center for drug evaluation and research (CDER)
  - Center for disease control (CDC)
12. A patent is valid for \_\_\_ years from the original date of application
- 10
  - 15
  - 20
  - 25
13. A \_\_\_ distinguishes the source of goods of one party from those of another.
- Phrase
  - Symbol
  - Design
  - Trademark
14. A new drug application is filed with the FDA at the end of \_\_\_.
- Phase 1
  - Phase 2
  - Phase 3
  - Phase 4
15. \_\_\_ is conducted on a small group of people (20-80).
- Phase 1
  - Phase 2
  - Phase 3
  - Phase 4
16. Determining effectiveness and identifying long-term risks are purposes of \_\_\_.
- Phase 1
  - Phase 2
  - Phase 3
  - Phase 4
17. The study design for \_\_\_ trials is usually a double blind, randomized control trial.
- Phase 1
  - Phase 2
  - Phase 3
  - Phase 4
18. Approximately how many clinical trials are currently underway worldwide?
- 50 – 55, 000
  - 55 – 60,000
  - 60 – 65,000
  - 65 – 70,000
19. One of the biggest legal challenges in clinical trials is \_\_\_.
- Luring qualified volunteers
  - Misrepresentation/fraud
  - Clarity of informed consent
  - FDA regulations and safeguards
20. Increasing legal threats may lead to a decline in \_\_\_.
- Quality of medical research
  - Willing volunteers
  - Clinical trials
  - Marketable drugs

# Tonsillectomy and Adenoidectomy 101

- 1. Recurrent ear infections can be treated with the removal of the \_\_\_\_.**
  - a. Tonsillar fossa
  - b. Tonsillar capsule
  - c. Adenoids
  - d. All of the above
- 2. \_\_\_\_ decreases postoperative pain, quickens recovery and aids in fewer readmissions for complications.**
  - a. Intracapsular tonsillectomy
  - b. Extracapsular tonsillectomy
  - c. Supercapsular tonsillectomy
  - d. Electrocautery
- 3. The use of a laser affords the patient \_\_\_\_.**
  - a. Less postoperative pain
  - b. More rapid healing
  - c. Less blood loss
  - d. All of the above
- 4. \_\_\_\_ is a powered rotary shaving device with continuous suction.**
  - a. Plasma knife
  - b. Harmonic scalpel
  - c. Coblator
  - d. Microdebrider
- 5. \_\_\_\_ is a bipolar radiofrequency low-level energy device that transfers to sodium ions, creating a thin layer of plasma.**
  - a. Plasma knife
  - b. Harmonic scalpel
  - c. Coblator
  - d. Microdebrider
- 6. A ----- uses the high-frequency ultrasound vibration of a titanium blade to cut and coagulate tissue with minimal thermal tissue damage.**
  - a. Plasma knife
  - b. Harmonic scalpel
  - c. Coblator
  - d. Microdebrider
- 7. After adenoid removal, tonsil sponges should be soaked in saline prior to application to \_\_\_\_.**
  - a. Avoid the risk of airway fire
  - b. Avoid wound contamination
  - c. Promote hemostasis
  - d. Promote adhesion
- 8. Required elements for the surgeon during a tonsillectomy include \_\_\_\_.**
  - a. A rolling chair
  - b. A headlight
  - c. An electro-surgical unit
  - d. All of the above
- 9. \_\_\_\_ is required throughout the procedure to keep the surgical field visible.**
  - a. A headlight
  - b. A mouth gag
  - c. Suction
  - d. A tonsil sponge
- 10. Timing the length of suspension of the mouth gag prevents \_\_\_\_.**
  - a. Swelling of the tongue
  - b. Decreased blood flow to the tongue
  - c. Excessive postoperative jaw pain
  - d. All of the above

## Advance Directives

- 1. The \_\_\_\_ requires that health care entities provide information concerning advanced directives.**
  - a. Patient Self-Determination Act of 1990
  - b. Patient's Bill of Rights
  - c. Limited power of attorney for health care
  - d. Durable power of attorney for health care
- 2. A/an \_\_\_\_ indicates that a proxy has been named to make health care decisions if the patient is unable to do so.**
  - a. Limited power of attorney for health care
  - b. Durable power of attorney for health care
  - c. Advance directive
  - d. Living will
- 3. A/an \_\_\_\_ dictates medical care if the patient is unable to make his/her wishes known.**
  - a. Limited power of attorney for health care
  - b. Durable power of attorney for health care
  - c. Advance directive
  - d. Living will
- 4. The patient Self-Determination Act of 1990 has \_\_\_\_ basic components.**
  - a. 1
  - b. 2
  - c. 3
  - d. 4
- 5. A/an \_\_\_\_ specifies the type of care that should be given or withheld if a patient is unable to communicate his/her wishes.**
  - a. Limited power of attorney for health care
  - b. Durable power of attorney for health care
  - c. Advance directive
  - d. Living will
- 6. The durable power of attorney for health care is sometimes also called a/an \_\_\_\_.**
  - a. Health care proxy
  - b. Medical power of attorney
  - c. a & b
  - d. None of the above
- 7. If the power of attorney has an expiration date, it is referred to as \_\_\_\_.**
  - a. Limited
  - b. Durable
  - c. Temporary
  - d. None of the above
- 8. A/an \_\_\_\_ is special advance directive that only applies to withholding CPR and ACLS in the event of cardiac or respiratory arrest.**
  - a. Living will
  - b. Medical power of attorney
  - c. Do not resuscitate
  - d. Health care proxy
- 9. If an original legal document is unavailable, a \_\_\_\_ can stand in its place.**
  - a. Notarized physician's note
  - b. Copy of the original document
  - c. Notarized attorney's note
  - d. Original must be obtained
- 10. A living will may contain provisions for:**
  - a. Pain management
  - b. Experimental treatment
  - c. Mechanical ventilation
  - d. All of the above

# Ulnar Collateral Ligament Reconstruction

- Ulnar collateral ligament (UCL) reconstruction surgery was pioneered by \_\_\_\_.**
  - Tommy John
  - Frank Jobe
  - David Altchek
  - James Andrews
- The UCL is made up of \_\_\_\_ bands.**
  - 1
  - 2
  - 3
  - 4
- Resection of both the UCL and the radial head can result in \_\_\_\_ of the elbow.**
  - Gross instability
  - Subluxation
  - Dislocation
  - All of the above
- \_\_\_\_ stress on the elbow during a pitch can overcome the tensile strength of the UCL, causing it to tear.**
  - Valgus
  - Flexion
  - Extension
  - Acceleration
- According to James Andrews, MD, the odds of partial UCL tears healing with non-surgical treatment is \_\_\_\_.**
  - 20%
  - 50%
  - 70%
  - 90%
- \_\_\_\_ is an example of acceptable autograft tendon.**
  - Palmaris longus
  - Gracilis
  - Plantaris
  - All of the above
- One advantage of allograft tendon is \_\_\_\_.**
  - Less likely to be rejected by the body
  - Takes less time to heal
  - More tissue is available to work with
  - All of the above
- The modified docking procedure was developed by \_\_\_\_.**
  - Frank Jobe
  - David Altchek
  - James Andrews
  - E Lyle Cain
- The docking technique features a higher rate of \_\_\_\_ than the traditional method.**
  - Postoperative nerve damage
  - Postoperative bone fracture
  - Postoperative return to competition
  - a & b
- Holes for the bone tunnel are drilled above and below the tubercle using a \_\_\_\_.**
  - Small bur
  - 2.0 drill bit
  - 4.5mm drill bit
  - Curette

## Ulnar Collateral Ligament Reconstruction – questions cont.

11. To approximate the tendon's normal location, it is checked in \_\_\_\_.
- Flexion
  - Extension
  - mild varus
  - a & b
12. The surgically-repaired arm is immobilized for \_\_\_\_ days postoperatively.
- 3-5
  - 5-10
  - 10-14
  - 14-21
13. External rotation of the shoulder is prohibited for \_\_\_\_.
- 10 – 14 days
  - Four weeks
  - Six weeks
  - Three months
14. The patient can resume a normal throwing routine at \_\_\_\_.
- 20 weeks
  - Six months
  - Nine months
  - One year
15. It is estimated that \_\_\_\_ percent of patients who undergo a second Tommy John procedure return to their pre-surgery level of play.
- 10
  - 20
  - 30
  - 40
16. In 2005, \_\_\_\_ of the surgical patients in E Lyle Cain's study were high school athletes.
- 10 percent
  - 25 percent
  - 33 percent
  - 40 percent
17. The increased number of UCL reconstructions in minors can be attributed to \_\_\_\_.
- Overanxious parents
  - Player wanting to throw harder
  - Players seeking second opinions
  - The overuse of young arms
18. Correcting and improving mechanics, as well as strengthening shoulders and rotator cuff muscles can \_\_\_\_.
- Increase pitch velocity
  - Increase injury potential
  - Increase recovery time
  - Decrease recovery time
19. Tommy John surgery provides \_\_\_\_ increased ability over a healthy, natural ligament.
- No
  - Slightly
  - Moderately
  - Significantly
20. \_\_\_\_ is/are a contributing factor to overuse of young arms.
- Year-round baseball leagues
  - Throwing a greater number of pitches
  - Throwing more difficult pitches
  - All of the above



# Obesity

- 1. A person's ideal weight is established by his or her \_\_\_\_.**
  - a. Height
  - b. Sex
  - c. Build
  - d. All of the above
- 2. \_\_\_\_ occurs when excess body fat accumulates to such levels that it affects a person's health.**
  - a. Obesity
  - b. Hypertension
  - c. Heart disease
  - d. None of the above
- 3. According to the CDC, \_\_\_\_ is the number one health threat in America.**
  - a. Obesity
  - b. Smoking
  - c. Heart Disease
  - d. Cancer
- 4. \_\_\_\_ is not a cause of obesity.**
  - a. Poor eating habits
  - b. Lack of exercise
  - c. High leptin levels
  - d. A sedentary lifestyle
- 5. According to Cynthia Ogden's study, \_\_ percent of American adults are obese.**
  - a. 65
  - b. 59
  - c. 31
  - d. 15
- 6. Medical conditions facing obese people include:**
  - a. Hypertension
  - b. Diabetes
  - c. Cardiac failure
  - d. All of the above
- 7. More than 80 percent of overweight people have \_\_\_\_.**
  - a. Heart disease
  - b. Type 2 diabetes
  - c. High levels of HDL cholesterol
  - d. All of the above
- 8. The state of \_\_\_\_ successfully banned junk food from being sold in its public school system.**
  - a. Texas
  - b. Colorado
  - c. Virginia
  - d. New York
- 9. The diet with the highest success rate is \_\_\_\_.**
  - a. Low in carbohydrates
  - b. Low in calories
  - c. Low in protein
  - d. Low in fat
- 10. Surgery is recommended for patients with \_\_\_\_.**
  - a. A BMI of 40
  - b. A BMI of 25-39.9 with serious obesity related conditions
  - c. Aversion to exercise
  - d. a&b

## Obesity – questions cont.

11. \_\_\_ involves the injection of fat-melting drugs.
- Liposuction
  - Mesotherapy
  - Restrictive bariatric surgery
  - Vertical banded gastroplasty
12. \_\_\_ removes fat deposits from under the skin by using a cannula attached to a vacuum.
- Liposuction
  - Mesotherapy
  - Restrictive bariatric surgery
  - Vertical banded gastroplasty
13. \_\_\_ was developed in the 1970s as a safer alternative to Roux-en-Y gastric bypass.
- Liposuction
  - Mesotherapy
  - Restrictive bariatric surgery
  - Vertical banded gastroplasty
14. \_\_\_ is the most common weight loss procedure today.
- Roux-en-Y gastric bypass
  - Biliopancreatic diversion
  - Gastric banding
  - None of the above
15. On average, \_\_\_ leads to a loss of 40 percent of excess weight.
- Roux-en- Y gastric bypass
  - Biliopancreatic division
  - Gastric banding
  - None of the above
16. \_\_\_ is considered the safest and least invasive weight loss surgery.
- Roux-en-Y gastric bypass
  - Biliopancreatic division
  - Gastric banding
  - Vertical banded gastroplasty
17. In \_\_\_, a reduced stomach is created and digestive juices are diverted to the small intestine.
- Roux-en-Y gastric bypass
  - Biliopancreatic division
  - Gastric banding
  - None of the above
18. About \_\_\_ percent of those who undergo vertical banded gastroplasty achieve normal weight, and about \_\_\_ percent achieve some degree of weight loss.
- 30, 80
  - 30, 50
  - 50, 30
  - 50, 80
19. \_\_\_ percentage of Americans are overweight or obese.
- 53
  - 47
  - 64
  - 35
20. Diabetes is projected to increase by \_\_\_ percent in the next 50 years.
- 100
  - 125
  - 145
  - 165

# Wound Management

- 1. Failure of a wound to heal can result in \_\_\_\_.**
  - a. Additional surgical procedures
  - b. Longer hospital stays
  - c. Long-term disability
  - d. All of the above
- 2. A full thickness surgical incision will be repaired by \_\_\_\_.**
  - a. Primary intention
  - b. Secondary intention
  - c. Polyglactin suture
  - d. Adhesive strips
- 3. Regeneration and repair of a pressure ulcer is an example of \_\_\_\_.**
  - a. Primary intention
  - b. Secondary intention
  - c. Granulation
  - d. Epithelialization
- 4. The proliferation phase of healing includes \_\_\_\_.**
  - a. Inflammation
  - b. Granulation
  - c. Contraction
  - d. b & c
- 5. The cessation of bleeding following an injury is \_\_\_\_.**
  - a. Contraction
  - b. Proliferation
  - c. Hemostasis
  - d. Maturation
- 6. \_\_\_\_ is classified as the early inflammatory stage of wound healing.**
  - a. Contraction
  - b. Proliferation
  - c. Hemostasis
  - d. Maturation
- 7. \_\_\_\_ may be regarded as the first line of defense against infection at the wound site.**
  - a. Neutrophil leucocytes
  - b. Basophils
  - c. Eosinophils
  - d. Monocytes
- 8. The class of compounds known as \_\_\_\_ are vital for cell-to-cell and tissue adhesion.**
  - a. Fibroblasts
  - b. Proteoglycans
  - c. Electrolytes
  - d. Glycoproteins
- 9. By keeping a wound moist, \_\_\_\_.**
  - a. Infection is more likely
  - b. Healing time is prolonged
  - c. Healing rates increase
  - d. Scarring is increased
- 10. Spillage of bile during a cholecystectomy is classified as a \_\_\_\_ wound.**
  - a. Clean
  - b. Clean/Contaminated
  - c. Contaminated
  - d. Dirty/Infected

## Wound Management – questions cont.

11. One intrinsic factor affecting wound healing is

\_\_\_\_\_.

- a. Wound perfusion
- b. Radiotherapy
- c. Medication
- d. Wound infection

12. One extrinsic factor affecting wound healing is \_\_\_.

- a. Disease
- b. Age
- c. Oxygen tension
- d. Radiotherapy

13. Surgical patients should eat within \_\_\_ of surgery for optimal clinical outcome.

- a. 6
- b. 12
- c. 24
- d. 48

14. \_\_\_ is a critical nutrient in optimizing the tensile strength of new tissue.

- a. Carbohydrate
- b. Protein
- c. Fat
- d. Vitamin A

15. \_\_\_ is a critical nutrient for collagen synthesis.

- a. Vitamin A
- b. Vitamin E
- c. Vitamin B
- d. Vitamin K

16. \_\_\_ is another critical nutrient for collagen synthesis.

- a. Iron
- b. Zinc
- c. Vitamin C
- d. All of the above

17. Attributes of a surgical dressing include the ability to \_\_\_.

- a. Enable gaseous exchange
- b. Maintain a dry environment
- c. Compress the wound
- d. Adhere to the skin

18. Low-cost, transparent adhesive film dressings are ideal for \_\_\_.

- a. Infected wounds
- b. Straight forward surgical wounds
- c. Acute surgical wounds
- d. Nonsurgical wounds

19. Factors to consider when selecting a wound dressing include \_\_\_.

- a. Level of exudates
- b. Depth of the wound
- c. Cost
- d. All of the above

20. A mild to moderate amount of exudate requires a \_\_\_ dressing.

- a. Alginate
- b. Simple adhesive film
- c. Hydrocolloid dressing
- d. Adhesive film/foam

# HIPAA Compliance

1. The two main goals of the HIPAA program are \_\_\_ and \_\_\_\_.
  - a. Privacy/accessibility
  - b. Portability/confidentiality
  - c. Portability/accountability
  - d. Privacy/accountability
  
2. Which is an example of health organization that is required to follow HIPAA privacy rules?
  - a. Health plans
  - b. Health care providers
  - c. Health care clearing houses
  - d. All of the above
  
3. Information that is created or maintained by a HIPAA-covered entity in any form is \_\_\_\_\_.
  - a. Medical records
  - b. Protected health information
  - c. Public domain
  - d. Available only to immediate family
  
4. Prior to interaction with a patient, the \_\_\_ must be given to the patient and a signed receipt must be verified.
  - a. Notice of privacy practices
  - b. Liability waiver
  - c. A & B
  - d. None of the above
  
5. The notice of privacy practices can be supplied via \_\_\_\_\_.
  - a. Written brochures
  - b. Posted information in the reception area
  - c. The entity's web site
  - d. All of the above
  
6. Written or printed information does not include \_\_\_\_\_.
  - a. Charts
  - b. Faxes
  - c. Emails
  - d. None of the above
  
7. Messages concerning appointments and lab results should only be left on an answering machine if \_\_\_\_\_.
  - a. The patient is not home
  - b. The patient has given consent
  - c. The information is time sensitive
  - d. Information should never be left on an answering machine
  
8. The most severe consequences for a HIPAA violation include \_\_\_\_\_.
  - a. A fine of \$100 per incident
  - b. \$25,000
  - c. 10 years in prison
  - d. All of the above
  
9. A notice of privacy should \_\_\_\_\_.
  - a. Explain the legal duties of the covered entity
  - b. Explain patient's rights and responsibilities
  - c. Disclose how information is used, stored and protected
  - d. All of the above
  
10. A business associate agreement includes \_\_\_\_\_.
  - a. A list of consequences for noncompliance
  - b. An advance directive
  - c. An appointed trustee
  - d. All of the above

# Maslow's Hierarchy of Needs

- 1. Maslow developed the concept for the hierarchy of needs by observing \_\_\_\_.**
  - a. Kurt Goldstein
  - b. His students
  - c. Monkeys
  - d. Infants
- 2. Based on observed reactions, the most important need in monkeys is \_\_\_\_.**
  - a. Water
  - b. Food
  - c. Play
  - d. None of the above
- 3. The \_\_\_\_ level of the pyramid addresses the need of being.**
  - a. Safety needs
  - b. Self-actualization
  - c. Esteem needs
  - d. Physiological needs
- 4. \_\_\_\_ needs make up the four lower components of Maslow's pyramid.**
  - a. Deficit
  - b. Being
  - c. Safety
  - d. Esteem
- 5. Drawing conclusions about spirituality is an example of \_\_\_\_ needs.**
  - a. Deficit
  - b. Being
  - c. Safety
  - d. Esteem
- 6. Needs that must occur for the body to survive are \_\_\_\_ needs.**
  - a. Safety
  - b. Esteem
  - c. Belongingness
  - d. Physiological
- 7. The body regulates itself by \_\_\_\_.**
  - a. Controlling its temperature
  - b. Counterbalancing hormones
  - c. Homeostasis
  - d. All of the above
- 8. Fear can prevent an individual from fulfilling \_\_\_\_ needs.**
  - a. Esteem
  - b. Belongingness
  - c. Safety
  - d. Physiological
- 9. Belongingness needs can be influenced by \_\_\_\_.**
  - a. Socially-accepted behaviors
  - b. Education levels
  - c. Economic status
  - d. All of the above
- 10. According to Maslow, a child who grows up in an affluent neighborhood is \_\_\_\_ likely to join a gang.**
  - a. More
  - b. Less
  - c. Just as
  - d. Cannot determine

## Maslow's Hierarchy of Needs – questions cont.

11. The highest platform in the category of deficit needs is \_\_\_\_.
- Physiological
  - Belongingness
  - Esteem
  - Safety
12. Self-esteem begins to manifest at \_\_\_\_.
- Age 2
  - Age 5
  - Age 12
  - Birth
13. The lower form of self-esteem is characterized by \_\_\_\_.
- A need to be respected by others
  - A low opinion of oneself
  - Confidence in one's abilities
  - Inferiority complexes
14. The higher form of self-esteem is characterized by \_\_\_\_.
- A need to be respected by others
  - A low opinion of oneself
  - Confidence in one's abilities
  - None of the above
15. Low self-esteem is characterized by \_\_\_\_.
- Constantly seeking validation/acceptance
  - Lack of self-respect
  - Unrealistic expectations for oneself
  - All of the above
16. "The single component of being" describes \_\_\_\_.
- High self-esteem
  - Self-actualization
  - Social acceptance
  - Maslow's Hierarchy of Needs
17. Fluctuation within Maslow's hierarchy is \_\_\_\_.
- Common
  - Probable
  - Constant
  - All of the above
18. The process of self-actualization can include \_\_\_\_.
- Defining oneself spiritually
  - Focusing on resolving deficits
  - Rejecting unfavorable aspects of one's life
  - a & b
19. Self-actualization is limited to \_\_\_\_.
- Dignitaries
  - Everyone
  - Scientists
  - Explorers
20. Maslow's Hierarchy of Needs is especially relevant in the \_\_\_\_ field.
- Medical
  - Educational
  - Self-help
  - All of the above

# Endoscopic Thoracic Sympathectomy

- ETS was initially developed to treat \_\_\_\_.
  - Goiter
  - Glaucoma
  - Epilepsy
  - All of the above
- The \_\_\_\_ is responsible for controlling involuntary bodily functions.
  - Autonomic nervous system
  - Central nervous system
  - Regulatory system
  - Homeostatic effect
- The \_\_\_\_ system slows down a function.
  - Homeostatic
  - Sympathetic
  - Parasympathetic
  - Autonomic
- The “fight or flight” response is triggered by the \_\_\_\_ system.
  - Homeostatic
  - Sympathetic
  - Parasympathetic
  - Autonomic
- The \_\_\_\_ are destroyed during the ETS procedure.
  - Sympathetic trunk
  - Sympathetic ganglia
  - Spinal nerves
  - None of the above
- ETS is a treatment for \_\_\_\_.
  - Hyperhidrosis
  - Epilepsy
  - Irregular heartbeat
  - All of the above
- Treatment options for idiopathic craniofacial erythema include \_\_\_\_.
  - Endoscopic thoracic sympathectomy
  - Valium
  - Cognitive behavioral therapy
  - All of the above
- \_\_\_\_ is a vascular disorder that affects blood flow to extremities in cold conditions.
  - Erythromelalgia
  - Raynaud’s Syndrome
  - Complex regional pain syndrome
  - Hypoxia
- Raynaud’s Syndrome can result in \_\_\_\_.
  - Gangrene
  - Skin ulcers
  - Skin atrophy
  - All of the above
- Thermography and radiography are two methods of detecting \_\_\_\_.
  - Erythromelalgia
  - Raynaud’s Syndrome
  - Complex regional pain syndrome
  - hypoxia



## Endoscopic Thoracic Sympathectomy – questions cont.

11. **Clamping the nerves allows for \_\_\_\_.**
- Irreversible procedure
  - Temporary relief
  - Improved functionality
  - Easier reversal process
12. **A \_\_\_\_ is not used in the ETS procedure.**
- Harmonic scalpel
  - Hemostat
  - Video tower
  - Fiber-optic light source
13. **Complications associated with ETS sometimes include \_\_\_\_.**
- Respiratory problems
  - Compensatory sweating
  - Horner's Syndrome
  - All of the above
14. **Disfiguring asymmetry of the face can indicate \_\_\_\_.**
- Raynaud's Syndrome
  - Horner's Syndrome
  - Erythromelalgia
  - Complex regional pain syndrome
15. **A reversal of the ETS procedure is possible by \_\_\_\_.**
- Performing a nerve graft
  - Removing the clip from the nerve
  - A or B, depending on the surgeon's method
  - The ETS procedure is not reversible
16. **Erythromelalgia cannot be described as \_\_\_\_.**
- Idiopathic
  - A rare disease
  - A curable disease
  - A & B
17. **\_\_\_\_ can trigger an EM flare-up**
- Heat
  - Physical activity
  - Anger
  - A & B
18. **EM can develop due to \_\_\_\_.**
- Psychological disorders
  - Neurologic or blood disorders
  - Physical contact with a carrier
  - A & B
19. **\_\_\_\_ do not blush in social situations.**
- Babies
  - Cognitive-behavioral therapy patients
  - ETS recipients
  - Everyone blushes
20. **Cognitive-behavioral therapy can include \_\_\_\_.**
- Rational emotive behavior therapy
  - Dialectic behavior therapy
  - Cognitive therapy
  - All of the above

## Radical Mastectomy and Reconstruction

- Breasts consist generally of \_\_\_\_.**
  - Secretory glands
  - Subcuticular fat
  - Overlying skin
  - All of the above
- \_\_\_\_ are modified sweat glands.**
  - Breasts
  - Mammary glands
  - Nipples
  - Superficial fascia
- \_\_\_\_ compose the suspensory ligaments of the breasts.**
  - Connective tissue stroma
  - Individual ductal and lobule systems
  - Dermal tissues of the breast
  - None of the above
- The lateral arterial blood supply to the breast does not include the \_\_\_\_.**
  - Fourth intercostal artery
  - Thoracoacromial artery
  - Lateral thoracic artery
  - Superior thoracic axillary artery
- Nearly \_\_\_\_ percent of lymphatic drainage of the breast drains laterally and superiorly to the axillary lymph nodes.**
  - 65
  - 70
  - 75
  - 80
- The \_\_\_\_ are the primary region to sample for cancer metastasis into the lymphatic system.**
  - Parasternal lymph nodes
  - Axillary lymph nodes
  - Lymphatic vessels
  - Intercostal veins
- The mammary glands are completely functional at \_\_\_\_.**
  - Puberty
  - The end of pregnancy
  - Birth
  - Conception
- hP1 is a hormone given off by the \_\_\_\_.**
  - Placenta
  - Pituitary gland
  - Secretory glands
  - None of the above
- \_\_\_\_ is the leading cause of death in women age 40-44.**
  - Heart disease
  - Lung cancer
  - Breast cancer
  - None of the above
- The risk of developing breast cancer is related to \_\_\_\_.**
  - Age when first child is born
  - Genetic factors
  - Family history
  - All of the above

## Radical Mastectomy and Reconstruction – questions cont.

11. \_\_\_ stimulates the secretory cells for lactation.
- Placental lactogen
  - Prolactin
  - Oxytocin
  - B & C
12. Breast cancers account for \_\_ percent of all cancers in women and \_\_ percent of cancer deaths.
- 30, 16
  - 43, 30
  - 16, 30
  - 43, 16
13. \_\_\_ provides a standardized way for physicians to determine information about a cancer's metastasis.
- Staging
  - Mammogram
  - Lumpectomy
  - None of the above
14. The most common staging system is the \_\_\_.
- Mammogram
  - Lumpectomy
  - Tumor Nodal Metastasis
  - None of the above
15. Pathological staging includes the results of a \_\_\_.
- Mammogram
  - Lumpectomy
  - Tumor Nodal Metastasis
  - All of the above
16. Patients have many treatment options, including \_\_\_.
- Radiation therapy
  - Chemotherapy
  - Hormonal therapy
  - All of the above
17. In TNM classification, the number following a T indicates \_\_\_.
- Size of the tumor
  - If the cancer has metastasized
  - If the cancer has spread to the lymph nodes
  - All of the above
18. \_\_\_ is considered a "breast conserving surgery".
- Mastectomy
  - Breast reconstruction
  - Needle localization and wide excision
  - B & C
19. In a \_\_\_, the surgeon removes a small volume of breast tissue.
- Mastectomy
  - Breast reconstruction
  - Lumpectomy
  - B & C
20. Removal of one or both breasts in a male or female patient is a \_\_\_.
- Mastectomy
  - Breast reconstruction
  - Lumpectomy
  - Needle localization and wide excision

## Radical Mastectomy and Reconstruction – questions cont.

21. An example of a minimally – invasive procedure is a \_\_\_\_.
- Simple mastectomy
  - Skin-sparing mastectomy
  - Halstead mastectomy
  - A & B
22. Methylene blue is used during a mastectomy to \_\_\_\_.
- Sterilize the surgical site
  - Provide local anesthetic
  - Outline the sentinel node
  - None of the above
23. The complete removal of the entire breast tissue is a \_\_\_\_.
- Simple mastectomy
  - Radical mastectomy
  - Modified radical mastectomy
  - Halstead mastectomy
24. A/an \_\_\_\_ is used to separate the breast tissue form the skin.
- Electrosurgical pencil
  - #15 blade
  - Harmonic scalpel
  - None of these above
25. In a TRAM flap reconstruction, the surgeon reconstructs the breasts with \_\_\_\_.
- Warm saline
  - Autologous fat
  - AlloDerm®
  - Artificial fillers
26. Axillary components and the pectoralis muscles are removed in a \_\_\_\_.
- Simple mastectomy
  - Radical mastectomy
  - Modified radical mastectomy
  - Bilateral mastectomy
27. To prevent cancer seeding, the wound is \_\_\_\_.
- Cauterized
  - Closed with absorbable suture
  - Irrigated with sterile water
  - All of the above
28. Complications of a mastectomy include \_\_\_\_.
- Infection
  - Disfigurement
  - Cancer metastasis
  - All of the above
29. In a modified radical mastectomy, \_\_\_\_ are removed.
- Only axillary components
  - Axillary components & pectoralis muscles
  - Both breasts, in their entirety
  - Only suspicious lumps
30. Specimens from mastectomy patients are examined \_\_\_\_ by the pathology department.
- Prior to scheduling surgery
  - Intraoperatively
  - Postoperatively
  - At follow-up appointments

## In-Office Autologous Fat Grafting

- 1. Plastic Surgery most often addresses which of Maslow's needs?**
  - a. Physiological
  - b. Safety
  - c. Love and belonging
  - d. Prestige and esteem
- 2. The most common facial locations for autologous fat grafting include \_\_\_\_.**
  - a. Nasolabial folds
  - b. Chin
  - c. Marionette grooves
  - d. All of the above
- 3. Which of the following does not describe an autologous fat graft?**
  - a. Safe
  - b. Permanent
  - c. Temporary
  - d. Reversible
- 4. The ultimate goal of cosmetic surgery is \_\_\_\_.**
  - a. Help the patient achieve a positive self-evaluation
  - b. Fix the patient's physical short-comings
  - c. Create a new image for the patient
  - d. Reverse the affects of aging
- 5. Patients who have undergone \_\_\_\_ are not good candidates for autologous fat grafting.**
  - a. Oral surgery
  - b. Organ transplant surgery
  - c. Abdominal surgery
  - d. All of the above
- 6. The choice of anesthetic for cosmetic procedures depends on \_\_\_\_.**
  - a. The patient's health
  - b. The number of procedures being performed
  - c. The patient's current medications
  - d. All of above
- 7. In a fat grafting procedure, the \_\_\_\_ are filled first.**
  - a. Nasolabial folds
  - b. Cheeks
  - c. Jaw line
  - d. None of the above
- 8. Nose reconstructions are believed to have been performed as early as \_\_\_\_.**
  - a. 2,000 BCE
  - b. 600 BCE
  - c. 1880
  - d. The Middle Ages
- 9. Who is the considered the father of plastic surgery?**
  - a. Pierre Joseph Desault
  - b. Karl Ferdinand von Gräefe
  - c. Johann Friedrich Dieffenbach
  - d. Sir Harold Gillies
- 10. Most cosmetic surgery cases are performed under \_\_\_\_.**
  - a. Local anesthetic
  - b. IV with sedation
  - c. General anesthesia
  - d. Acetaminophen

## In-office Autologous Fat Grafting – questions cont.

11. Alternative option for facial augmentation include \_\_\_\_.
- Botox
  - Chemical peels
  - Injectable fillers
  - All of the above
12. The term “plastic” is derived from a/an \_\_\_\_ word.
- Indian
  - Greek
  - Latin
  - Sanskrit
13. For facial procedures, the patient is put in the \_\_\_\_ position.
- Trendelenburg
  - Supine
  - Reverse Trendelenburg
  - Fowler’s
14. Who was a leading pioneer in skin grafts and sex-reassignment surgery?
- Gasparo Tagliacozzi
  - Karl Ferdinand von Gräefe
  - Johann Friedrich Dieffenbach
  - Sir Harold Gillies
15. After the fat is harvested, the next step is to \_\_\_\_.
- Inject the donor fat into the specified areas
  - Place the syringes in a centrifuge
  - Apply a cold compress to the surgical site
  - Cleanse the injection site
16. Cosmetic surgery became popular during the Renaissance due to \_\_\_\_.
- Syphilis
  - Nose amputation as punishment
  - Social pressures
  - All of the above
17. The oldest association for aesthetic surgery in the United States is the \_\_\_\_.
- American Academy of Facial Plastic and Reconstructive Surgery
  - American Association of Plastic Surgeons
  - American Association of Oral Surgeons
  - American Board of Plastic Surgery
18. The term “plastic surgery” was coined by \_\_\_\_.
- Pierre Joseph Desault
  - Karl Ferdinand von Gräefe
  - Johann Friedrich Dieffenbach
  - Sir Harold Gillies
19. From 1997 and 2007, the number of cosmetic procedures in the United States increased \_\_\_\_.
- 162 percent
  - 233 percent
  - 92 percent
  - 80 percent
20. The father of modern plastic surgery is \_\_\_\_.
- Pierre Joseph Desault
  - Karl Ferdinand von Gräefe
  - Johann Friedrich Dieffenbach
  - Sir Harold Gillies

# Infection in Orthopedic Surgical Procedures

- The most common microorganism causing orthopedic surgical-site infections is \_\_\_\_.**
  - Staphylococcus*
  - Acinetobacter*
  - Klebsiella*
  - Aspergillus*
- \_\_\_\_ thrives on plastic, including orthopedic prostheses.**
  - Staphylococcus epidermidis*
  - Staphylococcus aureus*
  - MRSA
  - All of the above
- The reservoir for *Staphylococcus* is the \_\_\_\_.**
  - Peritoneal areas of the body
  - Nose
  - Skin
  - All of the above
- Standard Precautions should be used with \_\_\_\_ patients.**
  - High-risk
  - All
  - Symptomatic
  - Open-wound bearing
- Hospital-acquired infections cost hospitals between \_\_\_\_ annually.**
  - \$150-200 million
  - \$1.5 – 2 billion
  - \$3.5 – 5.7 billion
  - \$6.7 – 9.5 billion
- Vasoconstriction in surgical patients can be caused by \_\_\_\_.**
  - Smoking
  - Diabetes
  - Intraoperative core hypothermia
  - All of the above
- \_\_\_\_ is the cause of the majority of SSI.**
  - Staphylococcus epidermidis*
  - Staphylococcus aureus*
  - MRSA
  - B & C
- \_\_\_\_ represents a break in the sterile field.**
  - Touching a nonsterile area with sterile gown or gloves
  - Touching surgical instruments with bare skin
  - Not properly wearing a surgical mask over the nose
  - All of the above
- OPIM stands for \_\_\_\_.**
  - Other Potentially Influential Material
  - Often Problematic Infectious Material
  - Other Potentially Infectious Material
  - Open Portal Infection Method
- \_\_\_\_ are options to improve decontamination of O.R. keyboards.**
  - Autoclavable keyboards
  - Plastic keyboard covers
  - Disinfectant solution
  - A & B

## Infection in Orthopedic Surgical Procedures - questions cont.

11. Environmental controls in the O.R. include \_\_\_\_.
  - a. Temperature
  - b. Humidity
  - c. Air flow
  - d. All of the above
  
12. A patient with a/an \_\_\_\_ should be scheduled at the end of the day.
  - a. Joint-replacement procedure
  - b. Pre-existing infection
  - c. Open wound
  - d. A & B
  
13. \_\_\_\_ is the most effective form of infection control in the hospital setting.
  - a. Hand washing
  - b. Sterile PPE
  - c. Proper sterile attire
  - d. None of the above
  
14. The ANSI/AAMI Guide to Steam Sterilization and Sterility states that implants should \_\_\_\_.
  - a. Come to the hospital sterile from the manufacturer
  - b. Be reprocessed on a case-by-case basis
  - c. Not be flash sterilized
  - d. All of the above
  
15. The temperature in the O.R. should be maintained between \_\_\_\_.
  - a. 68° - 75° F
  - b. 65° - 72° F
  - c. 60° - 68° F
  - d. Depends on the procedure
  
16. Disinfectants used in the O.R. must be \_\_\_\_.
  - a. Antiviral
  - b. Antifungal
  - c. Tuberculocidal
  - d. All of the above
  
17. Surgical incisions, traumatic wounds and pin sites are considered \_\_\_\_.
  - a. Reservoirs
  - b. Portals of Exit
  - c. Portals of Entry
  - d. Contributing factors of Susceptibility
  
18. An instrument can be sterilized in glutaraldehyde if immersed for \_\_\_\_.
  - a. 10 hours
  - b. 20 minutes
  - c. 6 hours
  - d. Items cannot be sterilized with glutaraldehyde
  
19. The humidity level in the O.R. should be maintained at \_\_\_\_.
  - a. 30 – 60 percent
  - b. 25-50 percent
  - c. 10-25 percent
  - d. Depends on the procedure
  
20. Antimicrobial prophylaxis refers to \_\_\_\_.
  - a. Hand washing
  - b. Sterile technique
  - c. Preoperative antibiotics
  - d. All of the above



# Answers CE CREDIT PKG 11: 22 CONTINUING EDUCATION CREDITS

Certified Member

AST Member No: \_\_\_\_\_

Name: \_\_\_\_\_

Certification No: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

## CE Credit PKG 11: 22 CONTINUING EDUCATION CREDITS

The fee is \$37. This package is only available to AST & ASA members.

Check Enclosed Yes, I want to pay by Credit Card:  Visa  MasterCard  AmEx

Card# \_\_\_\_\_ Expiration Date \_\_\_\_\_ Signature \_\_\_\_\_

### Drug Discovery, Development and Approval Process

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

### Tonsillectomy and Adenoidectomy 101

a	b	c	d	a	b	c	d	
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Mark one box next to each number. Only one correct or best answer will be selected for each question.

### Advanced Directives

a	b	c	d	a	b	c	d	
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Ulnar Collateral Ligament Reconstruction

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Obesity

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Wound Management

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## HIPAA Compliance

a	b	c	d	a	b	c	d		
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Maslow's Hierarchy of Needs

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Endoscopic Thoracic Sympathectomy

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Radical Mastectomy and Reconstruction

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d					
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	26.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	28.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	29.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## In-office Autologous Fat Grafting

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

## Infection in Orthopedic Surgical Procedures

a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Mark one box next to each number. Only one correct or best answer will be selected for each question.

