Total Knee Arthroplasty

1. The first known total knee implant was made of ________.
   a. Ivory  
   b. Plaster of Paris  
   c. Wood  
   d. Acrylic

2. From 1951 through the early 70s, the ________ was the primary knee replacement system.
   a. Polycentric knee  
   b. Condylar knee  
   c. Wallis hinge  
   d. Geometric prosthesis

3. Universal instrumentation was introduced in ________.
   a. 1975  
   b. 1987  
   c. 1978  
   d. 1971

4. Surgical navigation systems can record ________ intraoperatively.
   a. Joint range-of-motion  
   b. Laxity  
   c. Kinematics  
   d. All of the above

5. The greatest detriment to early robotics systems was ________.
   a. Inaccuracy  
   b. Cost and complexity  
   c. Training personnel  
   d. None of the above

6. A system with dedicated instruments that are compatible with different implant systems is considered ________.
   a. Open platform  
   b. Interchangeable  
   c. Imageless navigation  
   d. Precision 4.0

7. The ________ digitizes bony landmarks, monitored by a camera attached to a computer.
   a. Optical tracking system  
   b. Fixation pin  
   c. Camera  
   d. None of the above

8. The ________ is used to determine a patient’s correct standing anatomy.
   a. Femoral tracker  
   b. Femoral rotation axis  
   c. Mechanical axis  
   d. Reference for resection level

9. Pins are placed with the knee in flexion to reduce ________.
   a. Incidence of fracture  
   b. Muscle load  
   c. Collisions with the tibial implant  
   d. All of the above

10. When setting up for a total knee using navigation, the ST will need ________.
    a. Navigation jigs  
    b. Standard jigs  
    c. All regular total knee instruments  
    d. A&G only

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Acquired Adult Flatfoot Deformity

1. The talonavicular joint is located
   a. Between the talus and navicular
   b. On the anterolateral midfoot
   c. On the dorsal foot, below the ankle
   d. a & c

2. Attaching the posterior tibial tendon to the transferred FDL is called
   a. Midfoot dissection
   b. Tenodesis
   c. Spring ligament repair
   d. Ligament fixation

3. Surgical procedures to correct flatfoot include
   a. Spring ligament reconstruction
   b. Triple arthrodesis
   c. Subtalar arthrodesis
   d. All of the above

4. Weight-bearing radiographs should be taken
   a. Preoperatively
   b. Postoperatively
   c. At the surgeon's discretion
   d. Only when screws are used

5. The most common cause of adult-acquired flatfoot is
   a. Lateral hindfoot pain
   b. Navicular tuberosity
   c. Posterior tibial tendon dysfunction
   d. Achilles tendinitis

6. The _______ can be used to replace the posterior tibial tendon.
   a. Achilles tendon
   b. FDL tendon
   c. Peroneal tendon
   d. None of the above

7. _______ can be used to lengthen the lateral column in this surgical alternative.
   a. Iliac crest block autograft
   b. Structural allograft
   c. FDL transfer
   d. a & b

8. Varying degrees of flatfoot are present in ______ percent of the population.
   a. 10–25
   b. 15–30
   c. More than 50
   d. Unknown

9. In the lateral column lengthening procedure, the "bump" under the ipsilateral hip provides
   a. Support for the hip
   b. Relief of a bony pressure point
   c. Better access to the lateral side of the foot
   d. Stability for the thigh

10. Patients with painful arthritis or fixed flatfoot with PTTD are usually best served with
    a. Motion-sparing procedures
    b. Subtalar arthrodesis
    c. Triple arthrodesis
    d. b & c

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ACQUIRED ADULT FLATFOOT DEFORMITY 316 APRIL 2010 1 CE credit

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Hip Arthroscopy

1. The _________ should include the qualitative nature of discomfort, location, onset and history of trauma/developmental abnormality.
   a. Diagnosis  b. Treatment
d. Rehabilitation

2. Primary portals are placed _________.
   a. Anterior and anterolateral
   b. Anterior and posterior
   c. Anterolateral and posterolateral
d. Superior and inferior

3. A pincer lesion is located on the _________.
   a. Femoral head
   b. Femoral head neck junction
c. Acetabular fossa
d. Acetabular rim

4. The labrum is made up of _________.
   a. Fibrocartilage
   b. Osseous abnormalities
c. Bone
d. Hyaline cartilage

5. The ________ is/are located on the femoral head-neck junction.
   a. Cam lesion
   b. Pincer lesion
c. Labrum
d. Nerve fibers

6. The anterolateral portal penetrates the _________.
   a. Sartorius
   b. Rectus femoris
c. Gluteus medius
d. Greater trochanter

7. The femoral artery and nerve lie _________.
   to the anterior portal.
   a. Posterior
d. Superior
   c. Lateral
   d. Medial

8. A type 2 tear is _________.
   a. Detachment or pincer impingement
   b. Detachment or cam impingement
d. Intrasubstance tear or pincer impingement
   c. Intrasubstance tear or cam impingement

9. The anterior portal penetrates the _________.
   a. Sartorius
c. Gluteus medius
   b. Rectus femoris
d. Both a & b

10. Postoperative rehabilitation includes _________.
    a. Walking or light jogging
    b. Rest
    c. Crutches
d. Continuous passive motion and physical therapy

HIP ARTHROSCOPY: FEMOROACETABULAR IMPINGEMENT 317 MAY 2010 1 CE credit

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MAY 2010 | The Surgical Technologist | 227
Platysmaplasty

15 JULY 2010 1 CE credit

1. The _______ covers the external jugular vein in the neck.
   a. Platysma
   b. Deltoideus
   c. Superior part of the pectoralis major
   d. None of the above

2. A ___ is used to separate the subcutaneous layer from the platysma muscle.
   a. Army/Navy retractor
   b. Adson forceps
   c. #15 blade
   d. Straight Metzenbaum scissor

3. Patients must cease drinking and smoking ______ prior to the procedure.
   a. 24 hours
   b. One week
   c. Two weeks
   d. One month

4. Patients should wear an elastic bandage around the head and neck for ______.
   a. 24 hours postoperatively
   b. 48-72 hours postoperatively
   c. Up to five days postoperatively
   d. All of the above

5. Platysmaplasty can be performed using ______ anesthesia.
   a. General
   b. IV sedation
   c. Local
   d. All of the above

6. The method of suturing for this procedure is based on ______.
   a. Surgeon’s preference
   b. The amount of fat removed
   c. The type of suture
   d. a & b

7. ___ is administered preoperatively to help prevent infection.
   a. Cefoxin
   b. Cephalin
   c. Azithromycin
   d. Penicillin

8. To prevent bleeding, ______ are not allowed during the first week following surgery.
   a. Vitamin D
   b. Aspirin
   c. Acetaminophen
   d. a & b

9. Which item is not laid out on the Mayo stand?
   a. DeBakey tissue forceps
   b. Elastic bandage
   c. Head light source
   d. Surgeon’s magnified intense glasses

10. Possible complications from platysmaplasty include ______.
    a. Hematoma
    b. Infection
    c. Seroma
    d. All of the above

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Platysmaplasty: A Surgical Resolution for the Turkey Neck 15 JULY 2010 1 CE credit

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**Emergency Cesarean Delivery**

1. Early practice of Cesarean section often resulted in _______.
   a. Fetal bradycardia
   b. Shoulder dystocia
   c. Cardiac arrest
   d. All of the above

2. What important innovation helped make the Cesarean delivery safer in the mid-1800s?
   a. Anesthesia
   b. Blood bank
   c. ESU
   d. Oxytocin

3. The ________ must be present in the LDR during a Code Blue.
   a. Patient’s next of kin
   b. Anesthesiologist
   c. Blood bank
   d. In-house obstetric attending physician

4. The rarest presentation of a breech birth ________.
   a. Kneeling breech
   b. Complete breech
   c. Frank breech
   d. Footling breech

5. The ________ is placed in charge of obtaining additional supplies in emergency situations.
   a. Nurse manager
   b. Assistant nurse manager
   c. Patient’s primary nurse
   d. Runner

6. During the delivery, the ________ is delivered first.
   a. Bottom
   b. Head
   c. Feet
   d. Umbilical cord

7. Breach birth risks include ________.
   a. Umbilical cord prolapse
   b. Head entrapment
   c. Oxygen deprivation
   d. All of the above

8. What size blade does the surgical technologist need to incise the patient’s skin?
   a. #20
   b. #11
   c. #15
   d. #10

9. Which of the following factors is not influential in the occurrence of a breech birth?
   a. The sex of the baby
   b. Multiple fetuses
   c. Premature labor
   d. Uterine abnormalities

10. Who determines if the patient should be moved to the OR for further patient management and/or closure?
    a. Team leader
    b. Physician
    c. Medication nurse
    d. None of the above

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**Emergency Cesarean Delivery 320 August 2010 1 CE credit**

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Radical Neck Dissection

1. How many modifications to the radical neck dissection are there?
   a. 1  b. 2  c. 3  d. 4

2. The ___ is isolated and divided immediately after the external jugular vein.
   a. Anterior trapezius muscle  
   b. Omohyoid muscle  
   c. Internal jugular vein  
   d. Thyrocervical artery

3. The first radical neck dissection was performed by ____.
   a. George Crile  
   b. Hayes Martin  
   c. Oswaldo Suarez  
   d. Ettore Bocca

4. A ___ is used to protect the carotid artery in the event the patient has undergone previous radiation therapy.
   a. Sterile towel  
   b. Dermal skin graft  
   c. Sterile plastic adhesive  
   d. Fenestrated sheet

5. The lymph node groups and additional structures not included in the classic neck dissection are resected in the ____.
   a. Type I modification  
   b. Type II modification  
   c. Type III modification  
   d. Extended radical neck dissection

6. Surgical and anesthesia times increase significantly when ___ are used.
   a. Radial forearm flaps  
   b. Rectus abdominis flaps  
   c. Microvascular flaps  
   d. Nerve grafts

7. Which medical advancement allowed surgery to become the primary treatment for cancers of the head and neck?
   a. Radical neck dissection  
   b. Preservation of the spinal accessory nerve  
   c. Antibiotics  
   d. All of the above

8. Cadaveric tissue grafts may be successful in radical neck dissections because ____.
   a. It can reduce surgical time  
   b. It can reduce time under anesthetic  
   c. A previously-irradiated field does not affect its integration  
   d. All of the above

9. After the thyrocervical artery is clamped, divided and ligated, the ____ is/are dissected.
   a. Posterior triangle  
   b. Cervical and suprascapular arteries  
   c. Omohyoid muscle  
   d. None of the above

10. A radical neck dissection will generally keep a patient in the hospital for ____.
    a. 3-5 days  
    b. 5-7 days  
    c. 7-12 days  
    d. 13-15 days

Mark one box next to each number. Only one correct or best answer can be selected for each question.
Pectus Carinatum: Pigeon Chest

1. Pectus Carinatum is characterized by a/an ___ of the sternum.
   a. Protrusion
   b. Indentation
   c. Fracture
   d. A & C

2. Effects of pigeon chest include ___.
   a. Fatigue
   b. Dyspnea
   c. Psychological issues
   d. All of the above

3. The surgical procedure can take anywhere from ___.
   a. 2-4 hours
   b. 2-6 hours
   c. 4-6 hours
   d. None of the above

4. The Ravitch procedure has a ___ percent satisfaction rate among patients.
   a. 97
   b. 87
   c. 79
   d. 92

5. Patients’ cardiopulmonary function can be affected by ___.
   a. Mitral valve prolapsed
   b. Decreased lung capacity
   c. Impaired gas exchange in cardiopulmonary system
   d. All of the above

6. The Ravitch procedure does not involve ___.
   a. Cutting the costal cartilage
   b. Using a stabilization bar
   c. External pressure brace
   d. Removal of some costal cartilage

7. The ratio of males to females that develop pectus carinatum is ___.
   a. 3:1
   b. 7:2
   c. 6:2
   d. 5:1

8. The principal organs of respiration and circulation are protected by the ___.
   a. Thorax
   b. Pectoral muscles
   c. Sternum
   d. Thoracic vertebrae

9. The human body has ___ false ribs.
   a. Ten
   b. Six
   c. Three
   d. Two

10. A chest deformity characterized by an inverted sternum is ___.
    a. Pectus carinatum
    b. Pigeon chest
    c. Pectus excavatum
    d. All of the above

11. The intercostal spaces are located between the ___.
    a. Lungs
    b. Ribs
    c. Vertebral bodies
    d. Costal cartilages

12. Pectus carinatum can present at which phase of a patient’s life?
    a. At birth
    b. Post surgically
    c. During growth spurts
    d. All of the above

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13. Which genetic disorder is not considered a possible cause of pectus carinatum?
   a. Trisomy 21
   b. Morquio syndrome
   c. Brittle bone disease
   d. Scoliosis

14. One percent lidocaine with epinephrine, 1:200,000 describes _____.
   a. Sterile solution
   b. General anesthetic
   c. Local anesthetic
   d. Anxiety medication

15. In the case presented, the patient is in the _____. position for surgery.
   a. Reverse Trendelenburg
   b. Supine
   c. Trendelenburg
   d. None of the above

16. ____ is/are performed preoperatively to rule out genetic disorders.
   a. Blood tests
   b. Urine analysis
   c. X-ray
   d. ECG

17. The average hospital stay for this procedure is _____.
   a. 1-5 days
   b. 3-5 days
   c. 3-7 days
   d. 5-9 days

18. Preoperative diagnostic tests include _____.
   a. Pulmonary function
   b. CT scan
   c. Urine analysis
   d. All of the above

19. ____ is a genetic disorder in which the body cannot metabolize methionine.
   a. Homocystinuria
   b. Morquio syndrome
   c. Trisomy 18
   d. Marfan syndrome

20. Twisting movement or rapid elevation of the arms is restricted for _____.
   a. Two months
   b. Four months
   c. Six weeks
   d. Until postoperative checkup

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PECTUS CARINATUM: PIGEON CHEST 323 NOVEMBER 2010 2 CE credit

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Surgical Correction of Acquired Adult Flatfoot Deformity

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Mark one box next to each number. Only one correct or best answer will be selected for each question.
### Hip Arthroscopy: Treating Femoroacetabular Impingement

| a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d |
| 1. |   |   |   | 7. |   |   |   | 13. |   |   |   | 19. |   |   |   | 20. |   |   |   |
| 2. |   |   |   | 8. |   |   |   | 14. |   |   |   |   |   |   |   |   |   |   |   |
| 3. |   |   |   | 9. |   |   |   | 15. |   |   |   |   |   |   |   |   |   |   |   |
| 4. |   |   |   | 10. |   |   |   | 16. |   |   |   |   |   |   |   |   |   |   |   |
| 5. |   |   |   | 11. |   |   |   | 17. |   |   |   |   |   |   |   |   |   |   |   |
| 6. |   |   |   | 12. |   |   |   | 18. |   |   |   |   |   |   |   |   |   |   |   |

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

### Platysmaplasty: A Surgical Resolution for the “Turkey Neck”

| a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d |
| 1. |   |   |   | 7. |   |   |   | 13. |   |   |   | 19. |   |   |   | 20. |   |   |   |
| 2. |   |   |   | 8. |   |   |   | 14. |   |   |   |   |   |   |   |   |   |   |   |
| 3. |   |   |   | 9. |   |   |   | 15. |   |   |   |   |   |   |   |   |   |   |   |
| 4. |   |   |   | 10. |   |   |   | 16. |   |   |   |   |   |   |   |   |   |   |   |
| 5. |   |   |   | 11. |   |   |   | 17. |   |   |   |   |   |   |   |   |   |   |   |
| 6. |   |   |   | 12. |   |   |   | 18. |   |   |   |   |   |   |   |   |   |   |   |

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

### Emergency Cesarean Deliver in the Labor and Delivery Room

| a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d |
| 1. |   |   |   | 7. |   |   |   | 13. |   |   |   | 19. |   |   |   | 20. |   |   |   |
| 2. |   |   |   | 8. |   |   |   | 14. |   |   |   |   |   |   |   |   |   |   |   |
| 3. |   |   |   | 9. |   |   |   | 15. |   |   |   |   |   |   |   |   |   |   |   |
| 4. |   |   |   | 10. |   |   |   | 16. |   |   |   |   |   |   |   |   |   |   |   |
| 5. |   |   |   | 11. |   |   |   | 17. |   |   |   |   |   |   |   |   |   |   |   |
| 6. |   |   |   | 12. |   |   |   | 18. |   |   |   |   |   |   |   |   |   |   |   |

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

### Radical Neck Dissection

| a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d |
| 1. |   |   |   | 7. |   |   |   | 13. |   |   |   | 19. |   |   |   | 20. |   |   |   |
| 2. |   |   |   | 8. |   |   |   | 14. |   |   |   |   |   |   |   |   |   |   |   |
| 3. |   |   |   | 9. |   |   |   | 15. |   |   |   |   |   |   |   |   |   |   |   |
| 4. |   |   |   | 10. |   |   |   | 16. |   |   |   |   |   |   |   |   |   |   |   |
| 5. |   |   |   | 11. |   |   |   | 17. |   |   |   |   |   |   |   |   |   |   |   |
| 6. |   |   |   | 12. |   |   |   | 18. |   |   |   |   |   |   |   |   |   |   |   |

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

### Pectus Carinatum: Pigeon Chest

| a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d | a | b | c | d |
| 1. |   |   |   | 7. |   |   |   | 13. |   |   |   | 19. |   |   |   | 20. |   |   |   |
| 2. |   |   |   | 8. |   |   |   | 14. |   |   |   |   |   |   |   |   |   |   |   |
| 3. |   |   |   | 9. |   |   |   | 15. |   |   |   |   |   |   |   |   |   |   |   |
| 4. |   |   |   | 10. |   |   |   | 16. |   |   |   |   |   |   |   |   |   |   |   |
| 5. |   |   |   | 11. |   |   |   | 17. |   |   |   |   |   |   |   |   |   |   |   |
| 6. |   |   |   | 12. |   |   |   | 18. |   |   |   |   |   |   |   |   |   |   |   |

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