

Practice Exam Kit for the MBLEx



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Your Test Statistics

Test Mode	Test
Number of Questions	100
Number Correct	55
Number Incorrect	45
Number Not Answered	0
Date/Time Started	Jan 26, 2017 8:19 (PST)
Date/Time Finished	Jan 26, 2017 8:58 (PST)
Time Logged	1:14:42
Score	55%

Statistics by Section

#	Section	Questions	Correct	Incorrect	Unanswered	Score
1	Anatomy and Physiology	18	12	6	0	67%
2	Client Assessment	9	4	5	0	44%
3	Ethics, Boundaries, Rules and Regulations	7	5	2	0	71%
4	Guidelines for Professional Practice	6	4	2	0	67%
5	Kinesiology	8	6	2	0	75%
6	Massage History and Culture	8	2	6	0	25%
7	Miscellaneous Scenarios	19	8	11	0	42%
8	Pathology and Contraindications	16	11	5	0	69%
9	Physiological Effects of Massage	9	3	6	0	33%
Total:		100	55	45	0	55%

Test Preferences for this Test

Test Preference	Your Setting
Test Sections	ALL Sections - TestSIM
Prompts & Explanations	Off - TestSIM
Test Notes	Off - TestSIM

Question Order	Random - TestSIM
# of Questions	100 Questions
Time Limit	1 Hour, 50 Minutes

Your results for this test follow:

1. An epiphyseal line on a bone indicates what?

- a. The bone has begun a new growth phase.
- b. The bone was previously fractured in that location.
- c. The bone has stopped growing.
- d. The bone has reached its adult length.

Explanation: Long bones possess a cartilaginous zone between the diaphysis (midsection) and the epiphysis (end) called the epiphyseal plate. During childhood this allows the bone to continue growing in length. At some point the cartilage ossifies (becomes bone tissue), leaving a line of demarcation, the epiphyseal line. This indicates the bone has reached its adult length and no further growth in length will occur. However, the bone can continue to grow in diameter.

2. What color is associated with the heart chakra?

- a. Red
- b. Green
- c. Blue
- d. Violet

Explanation: The MBLEx candidate handbook indicates that the test may have questions covering the concepts of energetic anatomy. This question is an example of such a question. The heart chakra, positioned in the center of the chest, is associated with the color green or emerald green. The heart chakra represents the perceptions of love and the relationships between people and the world. The element of the heart chakra is air.

3. What is known as the "molecular unit of currency"?

- a. Actin
- b. ATP
- c. T cells
- d. Gamma globulins

Explanation: The "molecular unit of currency" is often used to describe the importance of ATP (adenosine triphosphate) to cellular functions within the body.

4. What does the term meiosis relate to?

- a. Cell division
- b. Milk production
- c. Muscle deterioration

d. Voluntary contractions

Explanation: Meiosis is a specific type of cellular division which is necessary for sexual reproduction.

5. Where would stratified transitional epithelium be located?

- a. Skin
- b. Muscle
- c. Bladder
- d. Tendon

Explanation: Stratified transitional epithelium are multi layered tissue cells that have the ability to expand and contract under stress and are the cells found in the bladder.

6. The following structures contain deoxygenated blood?

- a. Aorta
- b. Pulmonary vein
- c. Subclavian artery
- d. Pulmonary artery

Explanation: Arteries carry blood away from the heart. The pulmonary artery carries deoxygenated blood from the right ventricle of the heart toward the lungs. It is the only artery that carries deoxygenated blood.

7. In which region of the lung does the gaseous exchange occur?

- a. Alveoli
- b. Atrium
- c. Bronchii
- d. Trachea

Explanation: The alveoli also known as the pulmonary alveolus is the anatomical structure of the lung that has a hollow cavity in which air is compressed and then exchanged with blood. There is roughly 170 alveoli in one square millimeter in the functional structure (parenchyma) of the lung.

8. Where would you locate the annular ligament?

- a. Knee
- b. Ankle
- c. Wrist
- d. Elbow

Explanation: The annular ligament stabilizes the proximal radius against the ulna during pronation and supination of the wrist. The ligament is located deep to the supinator and origin of the extensor muscles of the forearm near the head and proximal shaft of the radius at the elbow.

9. The suffix -crine refers to:

- ✓ a. Secretions
- b. Inflammation
- c. Digestion
- d. Enzymes

Explanation: The suffix -crine refers to secretions. Endocrine gland is an example of the suffix -crine, which means an internal gland that secretes.

10. Which of the following is an example of a convergent muscle shape?

- a. Sphincter
- b. Biceps brachii
- ✓ c. Pectoralis major
- d. Sartorius

Explanation: A convergent muscle starts with a broad origin and converges to insert into a much smaller tendon. The pectoralis major is an excellent example of this muscle shape.

11. Which nerve passes through the flexor retinaculum of the hand?

- ✗ a. Trigeminal
- ✓ b. Median
- c. Radial
- d. Sciatic

Explanation: The median nerve passes through the flexor retinaculum of the hand.

12. What class of tissue is fascia?

- a. Epithelial
- ✓ b. Connective
- c. Nervous
- d. Muscular

Explanation: Fascia is the connective tissue that extends from head to toe, surrounding all our muscles, nerves and blood vessels and binds all of our tissues together. There are several layers of fascia including, superficial fascia, deep fascia and subserous or visceral fascia which covers and connects our organs. Fascia contains closely packed bundles of collagen fibers nestled in a wavy pattern parallel to the direction of force. Connective tissue types include tendons, bones, adipose tissue, blood, etc.

13. Which part of the lymphatic system is responsible for filtering the lymph?

- ✗ a. Ducts
- b. Vessels
- ✓ c. Nodes
- d. Capillaries

Explanation: Lymph nodes are a small ball or oval shaped organ of the immune system that contains lymphocytes, a type of white blood cell, which is responsible for transferring pathogens and waste into the lymph nodes for filtering.

14. Where would you locate an epiphysis?

- a. Femur
- b. Brain
- c. Kidneys
- d. Sternum

Explanation: An epiphysis describes the round end of a long bone such as the femur.

15. Which of the following muscles would contribute to wrist adduction?

- a. Extensor carpi radialis
- b. Extensor carpi ulnaris
- c. Flexor digitorum profundus
- d. Extensor pollicis brevis

Explanation: The extensor carpi ulnaris acts to both extend and adduct the wrist.

16. Which of the following hormones is responsible for the regulation of metabolism?

- a. Thyroxine
- b. FSH
- c. Progesterone
- d. Adrenaline

Explanation: Thyroxine, produced by the thyroid gland, is a hormone that affects nearly every cell in the body by regulating metabolic processes.

17. Osteophyte is the technical term for _____.

- a. a bone spur
- b. a tooth
- c. a bone fracture
- d. bone cancer

Explanation: An osteophyte is the technical term for a bone spur. A bone spur is an abnormal bone growth caused by old age, articular degeneration, disease or excessive wear and tear during mechanical instability.

18. What is the function of a bulboid corpuscle?

- a. Detect changes in temperature
- b. Receptor which responds to pressure
- c. Contract to stand hairs straight along body

d. Mucous membranes in the skin

Explanation: A bulboid corpuscle is a cutaneous thermo-receptor which detect changes in temperature and relay the message to the CNS.

19. Which of the following muscles elevates and retracts the mandible?

- a. Temporalis
- b. Splenius capitis
- c. Sternocleidomastoid
- d. Scalenes

Explanation: The temporalis muscle, originating at the temporal aspect of the cranium and inserting into the coronoid process of the mandible is responsible for elevation and retraction of the mandible. The temporalis is a major muscle involved with temporal-mandibular joint disorders.

20. The gracilis muscle is a functional part of which muscle group?

- a. Quads
- b. Hamstrings
- c. Gluteals
- d. Adductors

Explanation: The gracilis muscle, originating from the inferior ramus of the pubis and ramus of the ischium and inserting into the proximal medial shaft of the tibia at the pes anserinus tendon assists with flexion and medial rotation of the knee and is part of the adductor group of muscles.

21. Which of the following muscles is an example of a convergent muscle?

- a. Solar plexus
- b. Latissimus dorsi
- c. Brachioradialis
- d. Sartorius

Explanation: A convergent muscle starts from a broad origin and converges into a narrow insertion. The latissimus dorsi is an example of a convergent muscle.

22. What type of contraction is a person performing when they are simply holding a glass of water steady?

- a. Phasic
- b. Tonic
- c. Isotonic
- d. Concentric

Explanation: A muscle contraction that does not vary in length or intensity is a tonic contraction.

23. A tetanic contraction is under the control of the patient and is considered a voluntary contraction.

- a. True
- b. False

Explanation: A tetanic contraction is an involuntary contraction which occurs as a result of a hyperactive stimulation of motor neurons within a muscle. The contraction will remain constant over an extended period of time or as long as the artificial stimulant is active. The cause of this form of contraction can come from disease, electrical stimulation or toxins and drugs.

24. The orbicularis oculi is an example of a _____ muscle.

- a. convergent
- b. hydrostat
- c. circular
- d. fusiform

Explanation: The orbicularis oculi is the muscle that surrounds the eye and its muscle characteristic is circular.

25. Which muscle plantar flexes the ankle and inverts the foot?

- a. Tibialis posterior
- b. Tibialis anterior
- c. Soleus
- d. Plantaris

Explanation: The tibialis posterior is responsible for plantar flexing and inverting the foot.

26. Lunges, jumping jacks and sit-ups are considered _____ exercises.

- a. isometric
- b. flexibility
- c. anaerobic
- d. calisthenic

Explanation: Calisthenics are a form of aerobic exercise that are designed to increase body strength and flexibility with movements that include jumping, swinging, bending, twisting, pulling and more all while using a person's own bodyweight as the resistance.

27. When a medical doctor refers to the prognosis of a patient's condition, what are they referring to?

- a. The cause of the condition
- b. The pattern of the condition development
- c. The outcome of the condition
- d. The state of the current condition

Explanation: The Greek translation for "prognosis" literally means fore-knowing and as a medical term to describe the likely outcome of an illness. A prognosis can be highly accurate when applied to a large statistical population but becomes less reliable on a per person basis. There are many scales and formats

used to create various prognostic calculations. A complete prognosis would include the expected time, function and disease course of the patient.

28. A client diagnosed with hypokinesia will exhibit which of the following characteristics?

- a. Decreased heart rate
- b. Decreased movement of skeletal muscles
- c. Decreased respiration
- d. Decrease bowel function

Explanation: Hypokinesia is a condition of decreased skeletal muscle function and movement often associated with disease, illness or infection.

29. When a client is suffering from agnosia, which of the following symptoms would be expected?

- a. Inability to recognize people, places or things
- b. Loss of appetite
- c. Loss of bladder function
- d. Partial paralysis

Explanation: Agnosia is the loss of a person's ability to recognize people, places or things. The condition is usually linked to a brain injury or a neurological disorder and can affect sight or sound recognitions. Agnosia is not typically associated with memory loss.

30. What is a person suffering from when she has coryza?

- a. Impotence
- b. Excessive bleeding from small cuts
- c. Nasal congestion
- d. Dementia

Explanation: Coryza describes an inflammation of the nasal cavity that can cause nasal congestion, loss of smell and difficulty breathing. The condition can be caused by common colds, spicy food, allergies, changes in weather and many other triggers.

31. What part of the body is directly affected when a client has conjunctivitis?

- a. Lungs
- b. Heart
- c. Eyes
- d. Ears

Explanation: Conjunctivitis is the technical term for pink eye, a condition caused by either viral or bacterial infection of the conjunctiva or mucosal lining of the external surface of the eye. This condition is contraindicated until symptoms have completely resolved.

32. Which of the following conditions is expected when a client is placed on dialysis?

- a. Heart failure
- b. Colon failure
- c. Renal failure
- d. Liver failure

Explanation: Renal failure is a failure of the kidneys. Dialysis is used to filter the blood, a job mostly handled by the kidneys.

33. Which of the following is a parasitic skin infection?

- a. Carcinoma
- b. Tinea corporis
- c. Scabies
- d. Candidiasis

Explanation: Scabies is a contagious skin infection caused by a microscopic species of mite. Symptoms are skin rashes, blisters, itchy skin and sores from excessive itching. Scabies burrow into the skin to deposit eggs which mature in roughly 21 days. Scabies spread mostly through direct skin on skin contact and is a contraindication for massage.

34. What distinguishes a suppurative inflammation?

- a. Clear fluid discharge
- b. Puss
- c. Stiff, achy joints
- d. Swollen eyes

Explanation: A suppurative inflammation is characterized by an accumulation of neutrophils (white blood cells) at the microscopic level which will form puss at the gross level.

35. What is the term to describe the spread of cancer from one area of the body to another?

- a. Chemotaxis
- b. Metastasis
- c. Pinocytosis
- d. Anastalsis

Explanation: A cancer that has spread from one area of the body to another has metastasized and is in a state of metastasis.

36. Where would a Baker's cyst be located?

- a. Wrist
- b. Elbow
- c. Knee
- d. Ankle

Explanation: A Baker's cyst is a benign swelling of the semimembranous tissue or synovial bursa behind the knee. This condition is also known as a popliteal cyst but is often referred to by the name of the surgeon William Baker who first described the condition.

37. What would be expected of a client who is diagnosed with acromegaly?

- a. Enlargement of body structures
- b. Blindness
- c. Increased sensitivity to heat or cold
- d. Difficulty speaking

Explanation: Acromegaly is an endocrine system dysfunction in which the anterior pituitary gland produces excessive amounts of growth hormone, causing an enlargement of tissues, organs and body structures.

38. A client indicates they have a hematoma. What would a massage therapist expect to find?

- a. A benign growth of vascular tissue
- b. An area of bruising
- c. A malignant skin growth
- d. A large mole

Explanation: A hematoma is an accumulation of blood outside of a blood vessel and when this occurs in the skin it is known as a bruise. Any part of the body can accumulate blood and thus a hematoma can be found in muscles, the brain and other body parts.

39. If a client presents with a case of enteritis, which area of the body would be contraindicated from deep massage?

- a. Quads
- b. Neck
- c. Upper arm
- d. Abdomen

Explanation: Enteritis is an inflammation of the small intestines which can include symptoms of abdominal discomfort and pain, bloating, cramping, diarrhea, dehydration and fever. Mild cases of enteritis is locally contraindicated. However, more extreme cases would be a total contraindication of massage accompanied by a referral to seek immediate medical care.

40. Choose the best treatment option for a client with a ganglion cyst.

- a. Massage as normal while avoiding area
- b. Massage as normal with light massage on the cyst
- c. Massage as normal with deep tissue on the cyst
- d. No massage as the condition calls for a complete contraindication for therapy

Explanation: Ganglion cysts are benign soft tissue tumors that mostly occur around joints and more often around joints in the hands and feet. The condition is not serious and massage is acceptable for those with this condition, except that a ganglion cyst is locally contraindicated.

41. Osgood-Schlatter disease affects which part of the body?

- a. Ankle
- ✓ b. Knee
- c. Hip
- ✗ d. Spine

Explanation: Osgood-Schlatter disease is an irritation of the patellar tendon at the tibial tuberosity and it affects movement of the knee joint. The most visible symptom of the disease is a bump or protrusion at the tibial tuberosity.

42. What is the best technique for working the axilla?

- a. Deep tissue
- b. Trigger point
- c. Compression
- ✓ d. No technique

Explanation: The axilla is the armpit. A sensitive area that is full of lymph nodes, nerves, arteries and veins.

43. What condition is Phalen's test used to assess?

- a. Thoracic outlet syndrome
- ✗ b. Piriformis syndrome
- c. Radial tunnel syndrome
- ✓ d. Carpal tunnel syndrome

Explanation: The Phalen's test requires the client to firmly press the backs of the hands together for a duration up to a minute. If the client experiences pain, tingling or numbness in the thumb, index, middle and lateral half of the ring finger along the palmar side, then the test is positive for a carpal tunnel compression. The test can be done in reverse with palms pressed firmly together.

44. A client has recently been diagnosed with hyperthyroidism. Which of the following symptoms would you expect to notice about the client?

- ✓ a. Nervousness
- b. Fatigue and dullness
- ✗ c. Weight gain
- d. Sensitivity to cold

Explanation: Nervousness, a racing heart, trembling hands and anxiety are all common symptoms of hyperthyroidism. Hyperthyroidism is an overproduction of thyroid hormones which speed up chemical processes and metabolism within the body. The other answers are symptoms of hypothyroidism.

45. Hacking, tapping and pounding with loose fists are examples of _____.

- ✗ a. Petrissage
- b. Deep tissue

- c. Effleurage
- d. Tapotement

Explanation: Hacking, tapping and pounding are techniques of tapotement.

46. Applying force against an active movement by a client during an assessment is _____.

- a. active ROM
- b. active-assisted ROM
- c. passive ROM
- d. resistive ROM

Explanation: When a therapist applies force against an active movement during an assessment, they are providing resistive ROM. This is used to test for muscle strength and weakness.

47. A client is complaining of tension headaches focused along the temporal region. What should the massage therapist instruct the client to do to help locate and palpate the temporalis muscle?

- a. Client clench and relax their jaw
- b. Client open mouth and relax their jaw
- c. Pinch closed and open eyes
- d. Rotate head from side to side

Explanation: The temporalis muscle has one action and that is to clench the jaw during mastication. The best way to locate and palpate the temporalis muscle is to instruct the client to clench and release their jaw while the therapist feels for the origin and insertion of muscle fibers along the temporal bone.

48. Which of the following massage techniques would be best suited for a healed fracture?

- a. Trigger point
- b. Petrissage
- c. Tapotement
- d. Deep tissue

Explanation: The action of petrissage is best suited for moving stagnant blood and lymph away from an injury site and replacing it with nutrient rich blood and fresh lymph.

49. Placing your hands onto a client to assess their condition is known as a _____ assessment.

- a. visual
- b. palpation
- c. subjective
- d. postural

Explanation: Using your hands to assess the condition of a client is a palpation assessment.

50. What does the acronym HOPS relate to?

- ✓ a. full body assessment
- b. brain activity monitoring
- c. disease assessment
- d. strength and endurance training

Explanation: HOPS stands for History, Observation, Palpation and Special tests. HOPS is used to assess the client's experience, provide a postural assessment, give a physical examination, and test the function and structure of the client's body.

51. Using the AC joint during an assessment would give an indication of _____ symmetry.

- a. ankle
- b. hip
- ✓ c. shoulder
- d. head

Explanation: The AC joint is the acromioclavicular joint located at the junction of the acromion process and the clavicle. The AC joint is assessed to indicate the symmetry of the shoulder.

52. When working on an acute or subacute frozen shoulder, the best technique to reduce pain in your client is _____.

- ✓ a. Diaphragmatic breathing
- ✗ b. Active-passive range of motion
- c. Deep tissue massage
- d. Positive thinking

Explanation: Diaphragmatic breathing, also known as belly breathing or deep breathing, is based on engaging the diaphragm upon inhalation to draw in more air and oxygen into the lungs. The rhythmic action and increased oxygen assist in the parasympathetic response to reducing pain and stress.

53. Placing tension or force on a muscle to initiate a release is _____.

- a. reciprocal inhibition
- ✓ b. an autogenic inhibition
- c. an active release
- d. proprioceptive neuromuscular facilitation

Explanation: The application of force or tension on a muscle stimulates the Golgi tendon organ to become activated and triggers a release. This is an autogenic inhibition.

54. Metabolic effects of massage therapy upon the body are a combination of reflexive and mechanical effects.

- ✓ a. True
- b. False

Explanation: Metabolism is the process of chemical transformations within the body. These transformations can be caused by means of a physical stimulus or messages from the CNS. Massage therapy can provide both a mechanical and reflexive influence upon metabolism and this creates metabolic effect upon the body.

55. What function of the body is addressed by the gate control theory?

- a. Digestion
- b. Pain receptors
- c. Hormone release
- d. Homeostasis

Explanation: The gate control theory addresses the interruption of signals from pain receptors to the CNS by the manual stimulation of other receptors in a nearby region, which in effect closes the gate on the pain signal.

56. Which of the following anatomy does craniosacral therapy directly affect?

- a. Digestion
- b. Cerebrospinal fluid
- c. Lymph
- d. Interstitial fluid

Explanation: The craniosacral system consists of the skull, vertebrae, meninges and cerebrospinal fluid. The purpose of craniosacral therapy is to rebalance the flow of cerebrospinal fluid to restore sensory, motor and intellectual function.

57. What are ascorbic acid, tocopherols and flavonoids?

- a. Astringents
- b. Analgesics
- c. Vasodilators
- d. Antioxidants

Explanation: All three of these compounds are antioxidants which help reduce the oxidative stress caused by free radicals.

58. Which technique is best suited to elongate muscles, increase range of motion and decompress the spine?

- a. Myofascial release
- b. Compression
- c. Traction
- d. Shaking/jostling

Explanation: Traction is the gentle process of separating tissues and can be applied to any part of the body or extremity and is best suited to elongate muscles, increase range of motion and decompress the spine.

59. What is the reduction of pain by sufficient stimulation of specific points on a muscle?

- a. Trigger point
- b. Hyper-stimulation analgesia
- c. Dermatomes
- d. Counter irritations

Explanation: Hyper-stimulation analgesia literally translates to stimulation pain reduction. This method of pain reduction relies on the gate control theory to break the signal chain between pain receptors and the brain. The hyper-stimulation or painful stimulation of tissue near a pain site can disrupt the sensory and effectively close the gate of the pain circuit. Trigger points are located and used for hyper-stimulation analgesia but they are not action of reducing the pain.

60. What is the trait needed for a therapist to quiet the mind to help focus on the client's needs?

- a. Centering
- b. Intuition
- c. Professional boundaries
- d. Continued education

Explanation: One of the most important traits a massage therapist can develop is the ability to center themselves prior to performing a massage session. Centering will allow for a heightened sense of touch and ability to connect with the client.

61. Which of the following ethical principles is being followed when a massage therapist is conscientious about keeping clients updated with informed consent?

- a. Healthcare services
- b. Client autonomy
- c. Professional maintenance
- d. Confidentiality

Explanation: Client autonomy is when the practitioner keeps the client up to date about any possible changes or adjustments that can affect the client. This gives the client a chance to choose their course of action with the practitioner.

62. Boundaries are an integral aspect of the massage profession. Which of the following is a core value of boundaries?

- a. Establishing integrity
- b. Demanding respect
- c. Gaining acknowledgment from our peers
- d. Expecting loyalty from clients

Explanation: Having concise and clear boundaries is the best way to eliminate confusion and gain trust from a client, and in doing so the massage therapist establishes integrity.

63. A massage therapist has worked with a particular client for over a year now. In the last couple of massages, the therapist has noticed a shift in the way the client responds to the treatment but is not

able to discern anything specific. What could the massage therapist do to help the situation with the client?

- a. Talk with the client about intimacy issues.
- b. Be sure to adjust body language towards the client.
- c. Refer to a peer for support.
- d. Sign up for a continuing education class to deal with the client.

Explanation: Discussing the issue with a peer is the best step towards gaining an unbiased view of the situation. The other choices signal that the therapist has made an assumption about the dynamics surrounding the client's behavior.

64. At the beginning, the needs of a particular client were very simple. Initially, the client requested general relaxation massage with occasional focus on deeper layers of muscle. However, just over six months ago, the client was diagnosed with diabetes. Since then the client's condition has progressed beyond the comfort and skill level of the massage therapist, though the therapist continues to offer treatment. What has occurred?

- a. The massage therapist is operating outside the scope of practice.
- b. A needy client has become unreasonably demanding.
- c. A power differential.
- d. A dual relationship has been created.

Explanation: Sometimes a client can develop complex issues and it is important for a massage professional to "check in" with their own personal scope of practice to insure a healthy therapeutic relationship. In this case, the massage therapist should recommend another practitioner with special training to better assist the client.

65. Which of the following is an example of a massage therapist working as an independent contractor?

- a. A massage therapist has a regular schedule that is filled by an office manager.
- b. A massage therapist has direct access to clients and control over scheduling.
- c. A massage therapist receives income from an office and not the client.
- d. A massage therapist is expected to work a set schedule.

Explanation: There is conflict within the massage professional surrounding the parameters of working as an employee and working as an independent contractor. It is important to know your local laws regarding this issue. Typically, an independent contractor will have control over the details of the work, like having direct access to clients and control over scheduling, and will not be controlled by an employer.

66. A potential client calls to make an appointment for a massage. You notice that they are slurring their words and having difficulty speaking in complete sentences. They claim they were in an auto accident yesterday but declined medical attention. They awoke this morning feeling very sore and achy as well as having a pounding headache. They insist they need a massage. What is the appropriate plan of action for the massage therapist?

- a. Book the appointment immediately
- b. Book them within next week
- c. Refer to another therapist
- d. Immediately refer them to a doctor



Explanation: A person who has been in an auto accident could have any number of injuries including shock. For the safety of the client and your protection as a therapist, the best recommendation is to refer the client for a medical evaluation before any treatment is considered.

67. Which of the following best describes a massage therapist who routinely drapes clients in an immodest and unprofessional manner?

- a. The massage therapist needs additional training.
- b. The massage therapist is participating in a dual relationship.
- c. The massage therapists scope of practice needs to be redefined.
- d. The massage therapist has broken a code of ethics.

Explanation: There are times when undraping sensitive areas for treatment is within the scope of practice of massage. However, a massage therapist who routinely drapes in an unprofessional manner is breaking a standard of conduct indicated in the massage code of ethics.

68. Which of the following is the best description of PNF stretching?

- a. Hold-relax agonist
- b. Active stretching
- c. Passive stretching
- d. Active ballistic stretching

Explanation: PNF, or proprioceptive neuromuscular facilitation, utilizes mostly hold-relax type stretches on either the agonist or antagonist muscles.

69. Maintaining a therapeutic relationship with a client is very important. Which of the following should NOT be relied upon to preserve the relationship dynamic?

- a. Intuition
- b. Framework
- c. Boundaries
- d. Ethics

Explanation: Intuition is a wonderful aspect of the psyche and can be a great quality of the massage therapist. However, in the complex world of maintaining therapeutic relationships there must be a solid framework in place, clear boundaries identified and an adherence to the ethics set forth by the profession.

70. A client has called in to schedule a massage appointment after waking up with muscular pain and limited movement of her neck. She is requesting a medical massage treatment. Choose the correct way to proceed.

- a. No massage
- b. No massage and recommend a visit to the doctor
- c. Massage but avoid the area of concern
- d. Massage the area as needed without a prescription

Explanation: Medical massage is a term used to indicate massage specifically applied to treat muscular dysfunctions that can be perceived as a medical issue. However, a muscular dysfunction is not necessarily a medical issue which requires a medical release. Therefore, a massage practitioner who provides medical massage may provide treatment for muscular dysfunctions without requiring a prescription.

71. A client has been diagnosed with TMJ dysfunction and typically requests deep, focused massage around the head, neck and jaw to release tension. This morning, before a scheduled massage, the client visited a dentist for a checkup and ended up needing some additional work. The dentist gave the client a local anesthetic which still has an effect on the client. How should the therapist proceed with the typical jaw work that the client requests?

- a. Go extra deep to take advantage of the local anesthetic
- b. Work the area as normal
- c. Work in the area but use caution
- d. Avoid the area for this session

Explanation: A local anesthetic to the jaw will numb the area and prevent the client from giving appropriate feedback. Also, there might be an issue related to the dentist visit. If there is tissue damage, the client will not be able to tell until after the anesthetic has worn off. This could put the massage therapist at risk for injuring the client. It is recommended to avoid the area until the client has healed, long after the anesthetic has worn off.

72. During a treatment, a generous client complains of being too hot and would really prefer to remove all draping. How should the massage therapist respond to this situation? Select the best option below.

- a. Terminate the treatment for sexual suggestion
- b. Remove all draping and continue the massage
- c. Ignore the request and continue the massage
- d. Minimize cover while draping the private areas

Explanation: The client's request may be based on a valid perception of being hot. However, draping is an important aspect of maintaining the proper boundaries. Adjusting the draping to minimize coverage while maintaining modesty is clearly the best option.

73. What ratio of common household chlorine bleach to water should be used as a sanitizing solution?

- a. 1:100
- b. 1:10
- c. 1:1
- d. 10:1

Explanation: Common household chlorine bleach is an effective sanitizing solution for disinfecting surfaces, implements and linens. The solution should be diluted at a ratio of 1:10 by combining one part bleach with nine parts water. Dilution ratios are different than mechanical ratios in that the first number is subtracted from the second number to produce the correct total amount of a solution.

74. With regards to dermatomes, what area of the body feeds the trigeminal nerve with sensory information?

- a. Neck
- b. Lower back
- c. Feet
- d. Face

Explanation: Dermatomes are areas of the body that feed or are supplied by a single spinal nerve. The dermatome region for the trigeminal nerve is the entire face.

75. Which is the first massage association founded in the U.S.?

- a. New York State of Medical Massage Therapists
- b. American Association of Masseurs and Masseuses
- c. American Massage Therapy Association
- d. Associated Bodywork and Massage Professionals

Explanation: The first massage association founded was the New York State of Medical Massage Therapists in 1927.

76. Who is the author of the exercise and massage text, "De Arte Gymnastica"?

- a. Ambroise Pare
- b. John Grosvenor
- c. Hippocrates
- d. Girolamo Mercuriale

Explanation: Girolamo Mercuriale (Italy) philologist and physician included the benefits of exercise and massage in the text, De Arte Gymnastica.

77. Who is the Persian philosopher and physician who revitalized the healing methods of ancient Greece including the use of massage as a form of healthcare?

- a. Shivago Komarpaj
- b. Per Henrik Ling
- c. Hippocrates
- d. Rhazes

Explanation: Around 900AD the Persian philosopher and physician Rhazes shared the teaching of exercise, diet and massage from the ancient Greeks and Romans.

78. In TCM, which of the following organs is associated with the element of fire?

- a. Spleen
- b. Lung
- c. Liver
- d. Heart

Explanation: The heart (and small intestine) is the organ associated with the element of fire.

79. General fear, lack of discipline and restlessness is a deficient trait of which chakra?

- a. Root
- b. Solar plexus
- c. Throat
- d. Crown

Explanation: The root chakra (Muladhara) is the foundation of all spiritual development. If a person is experiencing issues of fear, or lack of discipline they are stuck in their root chakra.

80. In approximately which year was Tuina first recorded as a therapeutic modality?

- a. 5000 BC
- b. 1700 BC
- c. 1200 AD
- d. 1800 AD

Explanation: Tuina dates back to the Shang Dynasty of China around 1700 B.C. In current times Tuina is used to treat people of all ages by balancing the flow of qi (energy).

81. Who created Connective Tissue Therapy based upon his or her own experience of self healing?

- a. Ruth Rice
- b. Dolores Krieger
- c. Milton Trager
- d. Elizabeth Dicke

Explanation: While working as a physiotherapist in Germany, Elizabeth Dicke contracted a systemic infection that led to gangrene in her right leg. She also suffered from angina as well as gastric, kidney and liver problems that were so severe that the doctors could not amputate her infected leg. Elizabeth was set aside to die an agonizing death. Suffering from lower back pain, she chose to provide self massage and noticed sensations that referred down her leg. Over the course of a few months and with the help of her colleagues providing manual therapy, she was able to fully recover. From this experience she developed a protocol for massage, referred to as Connective Tissue Therapy.

You discover that one of your elderly clients is suffering from a fungal infection on his feet. You have been treating him regularly and may have been exposed to the fungus.

82. Which of the following is a fungal infection of the foot?

- a. Tinea cruris
- b. Tinea corporis
- c. Tinea pedis
- d. Tinea capitis

Explanation: Tinea pedis or athlete's foot, is a common, contagious fungal infection of the foot.

83. What are the implications for a client with tinea pedis seeking massage?

- a. Clients with tinea pedia are an absolute contraindication.

- b. Clients with tinea pedis may receive massage with no restrictions.
- ✓ c. Clients with tinea pedis are locally contraindicated for massage
- d. Clients with tinea pedis are indicated for reflexology

Explanation: Tinea pedis is highly contagious and, as such, clients with this condition are locally contraindicated for massage.

84. All of the following are effects of aging on the integumentary system EXCEPT:

- a. Decrease in collagen producing fibroblasts.
- b. Sebaceous glands decrease in size and function.
- ✗ c. Subcutaneous layer of the skin decreases in size.
- ✓ d. Increase in the number of melanocytes.

Explanation: As we age, the number of melanocytes decreases, causing greying of the hair and lighter skin.

85. The client also suffers from hypertension. Which of the following is NOT a precaution that should be taken?

- ✗ a. Only treat clients whose hypertension is medically controlled.
- ✓ b. Use thermotherapy when treating clients.
- c. Use lighter pressure.
- d. Side-lying position can improve venous return.

Explanation: Studies have shown that the application of heat can elevate blood pressure, therefore thermotherapy should be avoided.

86. Which of the following are inside the normal range for blood pressure?

- ✓ a. 120/75
- b. 115/95
- c. 130/85
- d. 140/90

Explanation: New federal guidelines classify normal blood pressure of 120 or less systolic and 80 or less diastolic.

Jesse's client, Melissa, has asked to receive a full body Lymph Drainage session. This is Melissa's first time receiving this massage and she has questions about the lymphatic system. She also does not like any type of deep work done and has asked for light pressure. When looking over Melissa's intake form Jessie noticed that Melissa has had issues with her thyroid.

87. In which direction does lymph move through the lymphatic system?

- a. Backwards
- ✓ b. Unidirectional
- c. Multi-directional
- d. It does not move.

Explanation: Lymph moves in one direction through the lymphatic system. Because of a one-way valve that is part of the lymph vessels, lymph is prevented from moving backwards.

88. Melissa marked on her intake form that she has had issues with her thyroid. What action needs to be taken?

- a. This is considered a contraindication.
- b. Refer to another therapist with special training.
- ✓ c. This is an indication and or precaution.
- ✗ d. Receive a doctor's approval before application of massage.

Explanation: Any thyroid issue is considered a precaution. A client may receive treatment but massage is locally contraindicated on and around the throat.

89. Jesse is thinking of creating an informational email to be sent to her clients prior to a lymph drainage session to prepare them for the procedure. Which of the following would not be included in the information because it is inaccurate?

- a. "You should arrive to your session well hydrated."
- b. "Do not consume alcohol or recreational drugs the night before your session."
- ✓ c. "Plan to rest without movement for 15 minutes after the treatment."
- d. "Do not apply lotion to your skin prior to treatment."

Explanation: Of the answer options, Answer C is inaccurate. A client who has undergone a lymph drainage session should be instructed to engage in gentle movement and breathing immediately after the session and continue it for at least 15 minutes. The reason is that the lymph system collects toxins and places them in the blood stream for removal. Fifteen minutes of movement, like a short walk, is critical.

90. What are the major functions of lymph nodes?

- a. They create RBCs, WBCs and platelets
- ✓ b. Filter lymph and assist the immune system
- c. Generate hormones
- d. Assist with blood clots

Explanation: Lymph nodes hold lymphocytes, which is a type of white blood cell, which protects the body from infectious agents. RBCs, WBCs and platelets are produced in the red bone marrow. Hormones are generated in the endocrine system. Lymphatic system belongs to the circulatory system. No lymph runs through the central nervous system.

91. Comparatively, how much pressure is to be used during the massage?

- ✓ a. Five ounces or the weight of a nickel
- b. Less than one ounce or the weight of a penny
- c. Over five ounces or the weight of a quarter
- d. Over eleven ounces or the weight of a half dollar

Explanation: Comparatively, five ounces of pressure, referred to as the feather touch, is to be used during a full body lymph drainage session. It would take around 11 pennies to generate the correct amount of weight.

A quarter weight and a half dollar piece weight are more than five ounces and would cause the lymphatic system to collapse. This could damage the filaments of the lymphatic capillaries, and cause edema.

You are in the gym exercising when you observe a young man sustain an injury while doing bicep curls. He sustained the injury while lowering a dumbbell from a position of elbow flexion. He appears to be in discomfort and is holding his right arm above the elbow.

92. Which of the following techniques would be best suited for breaking up excess scar tissue at the injury site?

- a. Cross fiber friction
- b. Effleurage
- c. Petrissage
- d. Tapotment

Explanation: cross fiber friction is ideal for breaking up scar tissue formed as a result of injury.

93. What is the name of the structure within a muscle cell that stores calcium for release when the fiber is stimulated to contract?

- a. Sarcomere
- b. Sarcoplasm
- c. Sarcolemma
- d. Sarcoplasmic reticulum

Explanation: The sarcoplasmic reticulum is a specialized smooth endoplasmic reticulum. It stores calcium that is released during muscular contraction.

94. Which type of muscle fiber is fast twitch, white, glycolytic?

- a. Type IIB
- b. Type IIA
- c. Type I
- d. Type V

Explanation: Type IIB muscle fibers are fast twitch, white, glycolytic. They produce energy by anaerobic metabolism, have few mitochondria and fatigue easily.

95. What name is given to the structure formed by a motor neuron and all of the skeletal muscle fibers that it innervates?

- a. Neurolgia
- b. Motor unit
- c. Sacomere
- d. Myosin

Explanation: Motor units are formed by a single motor neuron and the skeletal muscle fibers which it connects to or innervates. The purpose of the motor unit is to transmit the signal to contract to the muscle fibers. The combined motor units within a muscle are called a motor pool.

96. The man sustained a grade II strain of his right biceps brachii. Which of the following muscles is a synergist to biceps brachii?

- a. Triceps brachii
- b. Coracobrachialis
- c. Posterior deltoid
- d. Teres minor

Explanation: Coracobrachialis flexes the shoulder along with biceps brachii. Coracobrachialis also shares an attachment to the coracoid process of the scapula with short head of biceps brachii.

Sally and her friends have gone to the local spa. There is a steam room and they decide to all go in before the end of the day. Sally notices a bottle of eucalyptus spray. She fails to read the label that states do not spray directly on skin as it may cause irritation and burning. She thinks it would be a great experience to spray it on herself and step into the steam room. She has had some congestion and thinks it would be a great idea. While in the steam room her skin begins to burn and she runs out screaming. Her friends laugh at her and think she is overreacting. A massage therapist, who contracts with the spa to provide massage, comes into the wet room.

97. Why did Sally's skin begin to burn?

- a. Water and oil do not mix and the water will drive the oil deeper into the skin.
- b. She did not apply the oil correctly to her skin.
- c. She had damaged skin.
- d. You cannot apply eucalyptus oil to the skin you can only inhale it.

Explanation: Water and oil do not mix. So water cannot dilute essential oils. Only lipid based oils can dilute essential oils. Even if Sally had diluted the essential oil it may still have been too strong for her skin as the water would have driven the oil deeper into her skin. Eucalyptus oil can be inhaled and applied to the skin. When applied to skin always apply it to a small area first and wait to see how the skin reacts. It is important to have fatty oil handy just in case the skin is sensitive and it can be applied to the skin to dilute the essential oils.

98. What should the massage therapist do?

- a. Remove the client and her friends from the spa as they are causing a disruption.
- b. Apply fatty oil such as grape seed oil, coconut oil, vegetable oil or olive oil.
- c. Have the client take a shower and wash off the oil.
- d. Leave the client alone to let her take care of it.

Explanation: Applying a fatty oil will dilute the essential oil relieving client of additional pain. A therapist should calm the client down and explain that she will be giving her fatty oil to apply to irritated skin to dilute oil and this will help the irritation to go away. Do not use water, as water will drive the essential oil deeper into the skin. Leaving the client alone and not helping her could cause more damage to client's skin. The Code of ethics advises therapists to accept responsibility and to do no harm to the physical, mental and emotion wellbeing of a client. In this case, due to therapist being present when a client is in pain, it is ethical for a therapist to attend to the client.


99. How could the spa correct this from happening again?

- a. Post a notice on the steam room door about the use of eucalyptus oil.

- b. Do not provide eucalyptus oil in the steam room.
- c. Apologize to client and offer to pay for her medical bills.
- d. Do nothing, as this is a freak accident.

Explanation: Putting a sign on the steam room door that eucalyptus oil is only to be sprayed in the air and not directly on the skin, where it is visible for clients to see, will help with direction. Other ways to prevent this type of accident is to have the spa attendant inform clients of the correct application while checking them in. Also, the spa should advise all personnel on its use. Eucalyptus oil is widely used in steam rooms worldwide and is an expected aspect of a steam room by many. While discontinuing its use is a possible solution, it is not the best answer, as it can be used safely. While apologizing to the client is appropriate, it would not be corrective action to prevent this accident from happening again with other clients. Even though this incident may be rare, it is foreseeable and corrective action should be taken.

100. All of the following are health benefits of eucalyptus oil, except:

- a. Anti-inflammatory
- b. Decongestant
- c. Deodorant
-  d. Moisturizer

Explanation: Eucalyptus oil is known to have many medicinal qualities, including being an anti-inflammatory, decongestant, deodorant, anti-bacterial, as well as others. Although the oil is sometimes added to moisturizers to give them an aroma, the oil itself is not the moisturizing agent.