Home Study Test Questions - Upper Body Course

Please circle correct answers on the Answer Sheet

- 1. As reported in the Preface, most jobrelated injuries in America today result from:
 - Excessive amounts of lactic acid, hista mines, prostaglandins, bradykinins, and serotonin build-up in the muscles.
 - b. Muscle-joint strain and overuse syndromes
 - c. Not paying attention.
 - d. Performing tasks with inadequate training
- 2. To produce energy, the preferred fuel for extrinsic muscles is:
 - a. Lactic acid
 - b. Glucose
 - c. Oxygen
 - d. Essential fatty acids
- 3. Muscle spasm or guarding are terms used to describe the body's reaction to the threat of actual or perceived tissue injury.
 - a. False
 - b. True
- 4. Because calcium reacts with ATP to produce muscle contraction, tissue lengthening must soon be undertaken to prevent spasmodic muscles from releasing chemicals called:
 - a. Inflammation
 - b. Histamines
 - c. Myofibrils
 - d. Leukotrienes
- 5. The Myoskeletal Method utilizes the fascia's sensory receptor system to produce plastic deformation (creep) to help:
 - a. Remove soft tissue toxicity
 - b. Shut down neurological activity to the spinal cord

- c. Lengthen and strengthen muscles, ligaments, fasciae, and joint capsules
- d. Produce upper quadrant balance
- 6. Some manual therapists voice concern that third-party pay from insurance companies may propel the development of
 - a. "Fly-by-night" bodywork schools searching for ways to "work the system"
 - b. Too much insurance company control
 - c. Lack of student enrollment in schools
 - d. Inadequate licensing laws
- 7. Nikolai Bogduk's famous quote, "In God we trust; all others bring data" may prove unnecessary if somatic therapist can offer subjective evidence showing that we are helping people in pain.
 - a. True
 - b. False
- 8. In the Introduction chapter, pain is described as more than a sensation, or the physical awareness of pain; it also includes:
 - a. Perception
 - b. Concentration
 - c. Sensitivity
 - d. Limbic system activity
- 9. Researchers have shown that compression of a nerve root does not necessarily produce pain.
 - a. True
 - b. False
- 10. When asked what he considered to be a primary cause of most bodily pain and dysfunction ___ quickly responded, "lack of a variety of movement patterns."
 - a. Whitney Lowe
 - b. Aaron Mattes
 - c. Dr. Ross Pope
 - d. Moshe Feldenkrais

11. Defeatist attitudes are signs the client may:

- a. Move on to another therapist
- b. Have transference issues
- c. Not really want to improve
- d. Not believe in the innate healing power of the body

12. Which of the following is not a component of the Central Nervous System?

- a. Spinal cord
- b. Cranium
- c. Peripheral nerves
- d. Brain

13. Nociceptors are concentrated in areas more prone to injury such as:

- a. Gluteus maximus
- b. Brain
- c. Fingers & toes
- d. All the above

14. The thalamus interprets pain signals and quickly forwards them to the:

- a. Frontal cortex
- b. Somatosensory cortex
- c. Limbic system
- d. All the above

15. How does acute pain differ from chronic pain?

- a. Acute pain generally lasts longer
- b. Chronic pain persists after an injury heals
- c. Chronic pain is related to persistent or unidentifiable cause
- d. Both b & c are correct

16. Nerve root lesions can perpetuate pain even though the root itself is considered an insensitive structure.

- a. True
- b. False

17. Pain must be appreciated for helping us:

- a. Avoid dangerous situations
- b. Prevent further tissue damage
- c. Promote the healing process
- d. All the above

18. In Chapter 1, the following statement is made, "What are a few things therapists must look for during an evaluation"?

- a. Holding patterns during gait
- b. Aberrant firing order patterns
- c. Heart rate
- d. Both a and b

19. As opposed to the relaxation massage model, pain management history taking continues throughout each session.

- a. True
- b. False
- 20. The sympathetic nervous system consumes the greatest amount of body energy, uses more oxygen, and produces the most waste by-products; therefore it should be considered the fundamental underlying system of the body.
 - a. True
 - b. False

21. In the "Naughty 9' most common palpation errors, which two of the following do you personally consider to be therapeutically most counterproductive?

- a. Too intense pressure
- b. Too much movement
- c. Choosing the wrong tool for the job
- d. Ungrounding the client through faulty body mechanics

22. Speed is the enemy of depth just as lack of enthusiasm for learning is the enemy of:

- a. Memory
- b. Intelligence
- c. Status
- d. Passion

23. Resist the temptation to mentally 'box' the client's complaint in to a "fix-it" formula that excludes:

- a. Compassion
- b. Wisdom
- c. The body as the body's primary healer
- d. Therapeutic exercises

24. Which is not a useful tip for a history intake?

- a. Establish an anchor
- b. Encourage clients to convert generic memories into more concrete episodes
- c. Ask clients to recall their symptoms in reverse order
- d. Ask clients about past psychological issues
- 25. The Dirty Dozen chapter states, "As posture improves, many long-standing aches and pains disappear without the therapist ever having to know exactly which soft tissues were the actual pain-generators".
 - a. True
 - b. False

26. Compensations from exaggerated lordotic posture reverberate up the spine causing:

- a. Shoulders to roll forward on the ribcage
- b. Neck forward on the thorax
- c. Head to hyperextend on the neck
- d. All the above

27. Janda's upper crossed "tight line" traverses through:

- a. Levator scapulae and upper trapezius
- b. Longus capitis/colli and lower shoulder stabilizers
- c. Iliopsoas and lumbar erectors
- d. Abdominals and gluteus maximus

28. Creating tone in the weak abdominals flattens lumbar lordosis.

- a. True
- b. False
- 29. The most common error made in performing postural exercises for Upper and Lower Crossed Syndromes is:
 - a. Slumping
 - b. Standing with feet turned out
 - c. Not tucking in the pelvis
 - d. All of the above

- 30. In Chapter 4 the question is asked does "muscle imbalances occur when there is an alteration in length-tension relationship surrounding a given joint?"
 - a. True
 - b. False
- 31. An excellent example of reciprocal inhibition occurs in Janda's Upper Crossed Syndrome as the tight pectorals reciprocally weaken:
 - a. Deep neck flexors
 - b. Supraspinatus
 - c. Lower shoulder stabilizers
 - d. Iliopsoas

32. What term is defined as "acting together; enhancing the effect of another force."?

- a. Reciprocal inhibition
- b. Post isometric relaxation
- c. Synergistic
- d. Muscle energy

33. In the neck flexion test, the firing order pattern should be:

- a. Longus capitis, longus colli, anterior scalenes, and SCMs
- b. SCM, anterior scalene, longus colli, and longus capitis
- c. Anterior scalenes, multifidus, rotatores, and intertransversarii
- d. Longus capitis, longus colli, rectus abdominis, and SCMs

34. The medical community successfully treats "wallet-sciatica" by:

- a. Full consultation, clinical exam, and high-tech diagnostic testing
- b. Muscle Energy treatment to piriformis
- c. Inferior gluteal nerve injection
- d. Epidural injections
- 35. The Myoskeletal approach emphasizes that injury involving muscle pulls, joint trauma, and decompensation (structural break-down) has roots in predictable muscle imbalance patterns.
 - a. True
 - b. False

36.	Factors that can affect joint function and
	determine the degree of flexibility
	discussed in Chapter 5 include:

- a. Amount of applied force
- b. Tissue temperature
- c. Number of mechanoreceptors under stretch
- d. All the above

37. Which is not a basic barrier concept?

- a. Physiologic
- b. Stretch relex
- c. Elastic
- d. Anatomic

38. The plastic deformation sensation during myofascial manipulation has been attributed to:

- a. Mechanoreceptors
- b. Piezoelectricity
- c. Thixotropy
- d. All the above
- 39. The musculotendinous junction (MTJ) discussed in Chapter 6 is the weakest zone in the muscle-tendon unit:
 - a. True
 - b. False

40. In cases of tendon injury, it is best to:

- a. Only perform 1 joint mobilization technique weekly
- b. Stop everyday activities
- c. Apply heat for 20 minutes
- d. Mobilize the joint and connective tissues as soon as possible
- 41. Concentric contraction involves a muscle shortening while actively delivering energy, doing positive work and acting as an engine.
 - a. True
 - b. False

- 42. Many sports injuries are caused from forceful eccentric exercises that damage muscle fiber membranes.
 - a. True
 - b. False
- 43. Moshe Feldenkrais beautifully summarized the psychological ramifications of flexion dominance. People go into flexion in search of:
 - a. Emotional security
 - b. Car keys
 - c. Protection
 - d. Both a and c
- 44. Clinical evidence supports the fact that prolonged sitting neurological shortens the body's____
 - a. Hip extensors
 - b. Transversus abdominis
 - c. Sphenoid bone
 - d. Hip flexors
- 45. An optimally functioning body has no predictable firing order pattern during complex movements of the torso.
 - a. True
 - b. False
- 46. The transversus abdominis and lumbar multifidus are deep support muscles designed to stabilize the torso so other muscles can undertake maneuvers without compromising the stability of the:
 - a. Pelvic girdle
 - b. Respiratory diaphragm
 - c. Lumbar spine
 - d. Sphenoid
- 47. Depression is derived from the Latin word "deprimere" which means:
 - a. Dark cloud
 - b. To upset
 - c. To press down
 - d. Helpless

- 48. Does the human brain have the ability to generate pain in the absence of noxious input?
 - a. Yes
 - b. No
- 49. In the Simplifying Sensitization chapter, Hamilton Hall stated, "There is no simple cure because there is usually not a clear cut precipitating trigger associated with many forms of musculoskeletal pain."
 - a. True
 - b. False
- 50. A perfect example of the workings of sensitization can be found in the sometimes mysterious condition called:
 - a. Phantom limb pain
 - b. Sciatica
 - c. Thoracic outlet syndrome
 - d. Carpal tunnel syndrome
- 51. Pain management therapists should be cautious when assessing, speculating and particularly labeling perceived causes contributing to a client's neck and back pain.
 - a. True
 - b. False
- 52. In the athletic population, short leg syndromes and short hip flexors causes pelvic tilting that dramatically reduces:
 - a. Endurance
 - b. Coordination
 - c. Speed
 - d. All the above
- 53. The "Feet-shufflers" structural dilemma is primarily caused by tight, short:
 - a. Hamstring muscles
 - b. Quadratus lumbomm
 - c. Adhesive anterior hip capsule
 - d. Hyperpronation
- 54. In the Myoskeletal Approach, the treatment sequence is as follows:

- a. Lengthen tight agonist muscles
- b. Compress and distract adhesive hip capsule
- c. Tonify weak, neurologically inhibited tissues with fast-paced spindle techniques
- d. All the above
- 55. In Chapter 12 the question is asked, "What is a common interference to the body's nervous system"?
 - a. The twenty-four moving bones of the spinal column
 - b. The dysfunctional family
 - c. Anteriorly rotated ilia
 - d. Common Compensatory Pattern
- 56. For the body to sail smoothly through life, it must have the ability to:
 - a. Repair
 - b. Regulate
 - c. Protect itself
 - d. All the above
- 57. When the body's capacity to resist stress is overwhelmed, tonic muscles become:
 - a. Tight
 - b. Irritable
 - c. Inactive
 - d. Both a and b
- 58. Prolonged postural stress leads to predictable functional changes such as a loss of:
 - a. Flexibility
 - b. Normal breathing patterns
 - c. Chronic fatigue
 - d. All the above
- 59. In the Exploring Perfect Posture chapter, perfect posture is described as:
 - a. Body mass evenly distributed over a given base of support
 - b. Body mass in a mess
 - c. Structural adaptability
 - d. Perfect lower quadrant alignment
- 60. When the normal functioning of any part of the somatic system becomes over-stressed, a vicious cycle of pain and dysfunction ensues leading to decompensation.
 - a. True
 - b. False

- 61. During locomotion the myofascial systems antigravity springing mechanism decompresses and hydrates intervertebral discs.
 - a. True
 - b. False
- 62. During the hip hyperextension test the firing order should be:
 - a. Hamstrings, glute max, contralateral lumbars, and ipsilateral lumbar erectors
 - b. Glute max, hamstrings and both erectors.
 - c. Deep neck flexors, scalenes, SCM and trapezius
 - d. None of the above
- 63. In shoulder abduction, which muscle should not be included in the optimal firing order pattern?
 - a. Supraspinatus
 - b. Deltoid
 - c. Infraspinatus
 - d. Flexor carpi radialis brevis
- 64. Who made the classic statement, "In the presence of vertebral dysfunction, palpable 4th-layer spinal muscle hypertonicity will always be found?"
 - a. Vladimir Janda
 - b. Ida Rolf
 - c. Fred Mitchell, senior
 - d. Philip Greenman
- 65. Type 1 group dysfunctions causes three or more consecutive vertebral joints to rotate and side bend in opposite directions resulting in a functional scoliosis.
 - a. True
 - b. False
- 66. An enhancer is any client activated force (inhale to the count of 5, look up at your eyebrows and down at your toes, etc.) directed through the neuromyoskeletal system that aids the therapist in:
 - a. Releasing motion-restricted tissues
 - b. Treating migraines
 - c. Correcting forward head postures
 - d. Decompressing discs

- 67. "Go for a smooth grove" is a powerful statement emphasizing the importance of proper balance and alignment in all joint-related tissues in this vital area. Who made this statement?
 - a. Vladimir Janda
 - b. Philip Greenman
 - c. Ida Rolf
 - d. Fred Mitchell Jr.
- 68. No muscle, ligament or joint capsule should ever be taken into a nonphysiologic range of motion since this is outside the scope of practice for most massage and bodywork practitioners.
 - a. True
 - b. False
- 69. The Dirty Dozen treatment section begins with release of the:
 - a. Upper trapezi.us
 - b. Deep neck flexors
 - c. Levator scapulae
 - d. None of the above
- 70. "LPL" stands for:
 - a. Levator, Pecs, and Lats
 - b. Levator, Pecs, and Longus Colli
 - c. Longus colli, Pecs and Longus Capitis
 - d. All the above
- 71. The modified Corkscrew is designed to release which muscles?
 - a. Splenius capitis and cervicis
 - b. Anterior and middle scalenes
 - c. Levator and lats
 - d. Splenius capitis and semispinalis
- 72. The use of _greatly affects the therapeutic outcome when treating suboccipitals.
 - a. Enhancers
 - b. Activators
 - c. GTOs
 - d. None of the above

73. In the FRF Section, the therapist searches for 4th layer fibrosis that alerts them to the presence of:

- a. Joint fixations
- b. Hyperpronation
- c. Disc degeneration
- d. Tight erectors

74. Fast-paced fiber-activation techniques stimulate the:

- a. Dynamic gamma motoneuron system of the muscle spindle
- b. Limbic system
- c. Abdominals
- d. All the above

75. What sensory system in Chapter 17 responds to the position of the head in relationship to gravity and movement?

- a. Vestibular
- b. Limbic
- c. Musculoskeletal
- d. Enteric

76. Compensatory sagittal curves result in hyperkyphosis or hyperlordosis, whereas, horizontal compensations are referred to as rotations or torsions.

- a. True
- b. False

77. Acquired scoliosis arises from conditions such as:

- a. Psoas syndrome
- b. Inflammatory response
- c. Short-leg syndrome
- d. All the above

78. In the chapter "Scoliosis...A Case Study", Amy's structure indicated:

- a. Facet tropism
- b. Vertebral end-plate remodeling
- c. Nutritional deficiency
- d. Both a and b

79. The Short Right Leg Syndrome chapter discusses research by Denslow and Chase which found:

- a. Significant incidence of low right femoral heads
- b. Lumbar convexity to the short leg side
- c. Contralateral pelvic rotation
- d. All the above

80. Eighty percent of babies presenting in a normal left fetal lie are right vestibular and left motor dominant.

- a. True
- b. False

81. J. Gordon Zink discovered that 80 percent of subjects who considered themselves healthy presented with a (L/R/L/R) common compensatory pattern and 20 percent (R/L/R/L) were labeled as having:

- a. Cervicocranial pattern
- b. Cervicothoracic pattern
- c. Thoracolumbar pattern
- d. Uncommon compensatory pattern

82. A common substitution pattern in hip abduction is:

- a. Gluteus medius/minimus muscles firing late
- b. Gluteus medius/minimus recruited before quadratus lumborum
- c. Psoas fires before the rectus femoris
- d. Gluteus maximus fires before the hamstrings

83. During prolonged standing, the client's body weight routinely shifts over the vestibularly dominant left leg creating stretch weakness in the left gluteus medius/minimus.

- a. True
- b. False

84. Which of the following is a common self-regulating balancing foot pattern?

- a. Supination of foot on the short leg side
- b. Pronation of the foot on the short leg side
- c. Hyperpronation of both feet to bow the legs
- d. Supination of the foot on the long leg side

- 85. In the lower limbs, compensations at each level can be summarized as follows:
 - a. Ankle instability due to foot supination
 - b. Knee hyperextension on the short side and knee flexed on the long side
 - c. Externally rotated leg on the short side
 - d. All the above
- 86. It is theorized that fetal inertia during maternal acceleration stimulates what part of the vestibular apparatus causing left vestibular and right motor dominance?
 - a. Utricle
 - b. Saccule
 - c. Oracle
 - d. Uterns
- 87. What structure permits the rectus abdominis muscles to spread laterally during pregnancy?
 - a. Transversus abdominis
 - b. Internal obliques
 - c. Linea alba
 - d. Respiratory diaphragm
- 88. Myoskeletal Zone Therapy primarily focuses on rotation and sidebending fascial distortions of the spine and its associated diaphragms.
 - a. True
 - b. False
- 89. Zink reasoned that, optimally, there should be equal fascial rotational motion to both sides. This small group was labeled as:
 - a. Decompensated
 - b. Uncompensated
 - c. Ideal
 - d. Zoned out
- 90. In Dr. Pope's paper, he discuses labor and delivery and makes this statement, "The "bent twig" is an analogy used to describe the shape of the cranial bones and how they are often permanently modified by birth trauma before ossification takes place."
 - a. True
 - b. False

- 91. The mechanism of labor has been divided juto several cardjnal movements. Which of the following is not one of them?
 - a. Engagement
 - b. Flexjon
 - c. Extensjon
 - d. Expulsion
- 92. Myoskeletal Zone Therapy assessment and treatment begins with the. junction.
 - a. Lumbosacral
 - b. Cervicothoracic
 - c. Thoracolumbar
 - d. Cervicocranjal
- 93. If the client presents with a L/R/L/L pattern, which zone needs to be addressed in order to restore the common compensatory pattern?
 - a. Cervicocranial
 - b. Cervicothoracic
 - c. Thoracolumbar
 - d. Lumbosacral
- 94. If the client presents with a R/L/L/L pattern, treatment at what zone would bring him/her into a compensated state?
 - a. Cervicothoracic
 - b. Cervicocranial
 - c. Thoracolumbar
 - d. Lumbosacral
- 95. What diaphragm would you address if the client were decompensated at the thoracolumbar junction?
 - a. Occipitoatlantal membranes
 - b. Thoracic outlet/inlet
 - c. Respiratory
 - d. Pelvic
- 96. Which of the brain's centers represents the highest cortical level regulating muscle tone?
 - a. Corpus Callosum
 - b. Cerebral Cortex
 - c. Limbic
 - d. Thalamus

- 97. As their contour changes, mechanoreceptors supply the brain with vital information concerning shape, texture, weight and the landscape of objects in their external environment.
 - a. True
 - b. False
- 98. The vertebral artery is particularly at risk from bone spurring where it enters the spine at C6-7 and also at the occipitoatlantal membrane as it tucks up into the__.
 - a. Basilar artery
 - b. Odontoid process
 - c. Foramen Magnum
 - d. Brain stem
- 99. Hyperextension combined with rotation of the head on neck results in compression of the vertebral artery on the contralateral side up to 90 percent.
 - a. True
 - b. False
- 100. In forward head postures, the extensor muscles must isometrically hold back the weight of the head and also an extra 10 pounds for every:
 - a. Inch the head moves forward of the thorax in the sagittal plane
 - b. Two inches the head moves forward of the sternoclavicular joint
 - c. One inch C7 moves forward of T1
 - d. None of the above
- 101. The most common instigator of a straightneck trauma-induced posture is
 - e. too much computer work
 - a. Poor sleeping habits
 - b. Acceleration/deceleration whiplash injury
 - c. Football injury
- 102. The Uncovertebral Joints of Von
 Luschka keep the nerves free of
 obstructions as they guide these sensitive
 structures away from the thoracic spine.
 - a. True
 - b. False

103. The human body contains how many neurons?

- a. One million
- b. Ten million
- c. 100 million
- d. Over 100 billion

104. Most scientists have dismissed the

nerve root as a pain sensitive structure due to the lack of:

- a. Motor loss
- b. Sensory deficits
- c. Reflex abnormalities
- d. All the above

105. The sinuvertebral nerve innervates the:

- a. Nerve root dura
- b. Posterior longitudinal ligament
- c. Supraspinous ligament
- d. Both a and b

106. As we age we lose mechanoreceptors causing less gating and more pain.

- a. True
- b. False

107. The word migraine comes from the Greek word hemicranos which means:

- a. Heck of a headache
- b. Half-head
- c. Hammer head
- d None of the above

108. Pain from a common headache often results from:

- a. Dilation
- b. Head-banging
- c. Vasoconstriction
- d. Vasodilation

109	. Although women have forty percent less
	neck musculature than men, the female
	head still represents approximately eight
	percent of a woman's total body weight
	the same percentage as in men.

- a. True
- b. False

110. Joint capsules consist of two parts:

- a. Fibrous capsule and the synovial membrane
- b. Synovial fluid and hyaline cartilage
- c. Articular cartilage and ligaments
- d. None of the above

111. Bogduk found that most head and upper neck pain stemmed from what referred facet joints?

- a. CS-6
- b. C2-3
- c. C6-7
- d. Atlas -Axis

112. The basic functions of spinal nociceptors include:

- a. Evocation of pain
- b. Tonic neck reflexes
- c. Triggering protective muscle spasm for the protection and stability of the spine
- d. All the above

113. Traditionally, muscle weakness may be attributed to two factors:

- a. Decreased number of extrafusal fibers (atrophy)
- b. Failure to activate all muscle fibers (inhibition)
- c. Poorly trained personal trainer and noncompliant client
- d. Both a and b
- 114. A positive test for a forward head posture requires that the zygomatic arch be more than 3 centimeters forward of the sternoclavicular joint.
 - a. True
 - b. False
- 115. 15. As the head moves forward on the neck, tight hyoids traction the mandible posterior/inferior causing jaw

- a. Protrusion
- b. Retrusion
- c. Retention
- d. Dementia
- 116. The brain and spinal cord are suspended within the skull and vertebral column by tooth-like ligaments.
 - a. Longitudinal
 - b. Transverse
 - c. Denticulate
 - d. Interspinous

117. Which of the suboccipital muscles are most responsible for pain from stomach-sleeping?

- a. Rectus capitis posterior major
- b. Rectus capitis posterior minor
- c. Inferior obliques
- d. Superior obliques

118. What teacher called the coccyx the "seat of the soul."?

- a. Philip Greenman
- b. James Waslaski
- c. David Kent
- d. Ida Rolf
- 119. The __itself has no nociceptors and is therefore insensitive to pain.
 - a. Ligament
 - b. Pelvic diaphragm
 - c. Respiratory Diaphragm
 - d. Brain
- 120. Melzack and Wall proposed a unique system where small diameter nerve fibers carry pain stimuli through a mechanism.
 - a. Gating
 - b. Receptor
 - c. Electrochemical
 - d. Electromagnetic
- 121. Passive mechanoreceptor release requires that the therapist apply gently sustained force using the Law of Inertial Mass until tissue moves freely in all directions
 - a. True
 - b. False

- 122. Cutaneous receptors do not affect joint pain. Only active stimulation of joint receptors through active movements affects articular receptors.
 - a. True
 - b. False
- 123. The types of pain according to clinical signs and symptoms include:
 - a. Psychogenic
 - b. Neuropathic
 - c. Somatic
 - d. All the above
- 124. Work with the client's ventilatory process by applying pressure on_and resisting on
 - a. Exhalation inhalation
 - b. Flexion extension
 - c. Inhalation exhalation
 - d. None of the above
- 125. ART is the acronym used to describe the following:
 - a. Articular Restriction Test
 - b. Anterior Rotation Test
 - c. Asymmetry, restriction of motion and tissue texture abnormality
 - d. Asymmetrical resistance Test
- 126. Therapists should expect positive clinical results to exceed each Myoskeletal session due to increased mechanoreceptive activation and less joint complex nociception.
 - a. True
 - b. False
- 127. The consolidated surge of noxious stimuli jams neurological pathways leading to a condition called:
 - a. Spondylosis
 - b. Osteoarthritis
 - c. Cross-talk
 - d. Sensitization

- 128. In the Chapter Sensory Receptor Overview, Dalton refers to painful, long-lasting vertebra/rib dysfunction as:
 - a. Group curve
 - b. Joint capsule fixation
 - c. Ligament contracture
 - d. Dual-fixation
- 129. The basis of the Myoskeletal Approach for creating joint-play is:
 - a. Pelvic balancing
 - b. Conecting hyperpronation
 - c. Joint mobilization through muscle manipulation
 - d. Joint manipulation through mt1scle mobilization
- **130.** The Brugger Test alerts the therapist to the possibility of:
 - a. Cervical fixation creating pelvic obJiquity
 - b. Neck pain emanating from pelvic imbalance
 - c. Suboccipital pain due to forward head posture
 - d. Motion restricted cervicals due to tight suboccipitals
- 131. When the Neck Flexion Test creates radicular pain, an orthopedic workup may be necessary due to the possibility of:
 - a. Nerve root impingement
 - b. Trigger points
 - c. Cranial imbalances
 - d. Ligament laxity
- 132. Resistance to right sidebending at C5-6 is encountered with the client's head in extension, the C5-6 facet joint on the right is not___
 - a. Rotating
 - b. Happy
 - c. Closing
 - d. Opening

- 133. In translation, the superior spinal segment is braced testing the ability of the inferior segment to open and close properly.
 - a. True
 - b. False
- 134. If restriction is met during right translation of C5 on C6 with the neck in flexion, the right facets are not:
 - a. Part of the group dysfunction
 - b. Opening properly
 - c. Closing properly
 - d. Gliding anteriorly
- 135. The most common O-A dysfunction occurs when the right occipital condyle loses the ability to glide posteriorly on atlas.
 - a. True
 - b. False
- 136. Always reposition fingers if a pulse is felt or zingers radiate down the arms.
 - a. True
 - b. False
- 137. In a right cervical extension restriction, the facets on the client's left won't:
 - a. Close
 - b. Rotate properly
 - c. Translate
 - d. Sidebend