

pathology chpt 4 packet

Multiple Choice

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

INTRODUCTION

- _____ 1. When peripheral nerve tissue is damaged it can often grow back and repair itself. This capacity is provided by ...
- Nodes of Ranvier
 - Dendrites
 - Neurilemma
 - Myelin
- _____ 2. Where is neurilemma found?
- On the nerve fibers of the central nervous system
 - Throughout the central and peripheral nervous systems
 - Lining the spinal canal
 - On the nerve fibers of the peripheral nervous system
- _____ 3. What is the purpose of myelin?
- To promote healing in damaged peripheral neurons
 - To speed nerve conduction and provide electrical insulation
 - To transmit nerve signals from the receptor sites to the cell bodies
 - To transfer signals from presynaptic to postsynaptic neurons
- _____ 4. According to the International Association for the Study of Pain, pain is ...
- “A signal that tissue may be damaged if a behavior is not immediately interrupted”
 - “An unpleasant sensation that can range from mild, localized discomfort to agony, with both physical and emotional components”
 - “Physical suffering or discomfort caused by illness or injury”
 - “An unpleasant sensory or emotional experience associated with actual or potential tissue damage, or described in terms of such damage”
- _____ 5. Why is it useful for massage therapists to be familiar with concepts about chronic pain?
- Massage therapy cures pain; massage therapists benefit from knowing how this process works
 - Pain is processed mainly in the skin; this is the point of contact for massage therapists
 - Pain is one of the most challenging issues in health care; massage therapy may be able to provide some help
 - Massage therapists are highly empathic and need to be well educated about pain to avoid becoming vulnerable to our clients' disorders

Name: _____

ID: A

ALZHEIMER'S DISEASE

- _____ 11. What is the best definition of Alzheimer disease?
- The result of a long history of transient ischemic attacks, mostly seen in older people
 - A progressive degenerative dementing disorder that mostly affects people over 65 years old
 - Hardening of the arteries in the cerebrum that leads to memory loss
 - Damage to the memory centers of the brain that leads to memory loss in people over 70 years old
- _____ 12. What disease involves the accumulation of material in the cerebral cortex that interferes with normal synaptic activity and leads to several problems, including the loss of short-term memory, possible personality changes, and ultimately system-wide failure?
- Bipolar disease
 - Amyotrophic lateral sclerosis
 - Parkinson's's disease
 - Alzheimer's disease
- _____ 13. One of the factors in Alzheimer's disease is the shrinking of the hippocampus. Why is this important?
- The hippocampus is our aging center: when it degenerates we age more quickly
 - The hippocampus controls sympathetic and parasympathetic responses
 - The hippocampus processes and stores new knowledge and information
 - The hippocampus organizes where incoming sensory information is processed
- _____ 14. It appears that the plaques and tangles seen with Alzheimer's disease cause symptoms because ...
- They lead to the loss of neural tissue and important neurotransmitters
 - They stimulate uncontrolled muscle spasms instead of managing memory storage
 - They cause cerebral cortex neurons to grow new but dysfunctional receptors
 - They interfere with inter-cerebral communications, leading to mixed signals and myelin destruction
- _____ 15. What is one strategy believed to reduce the risk of developing Alzheimer's disease?
- Don't use tobacco products
 - Develop a habit of lifelong learning
 - Get at least 20 minutes of exposure to sunlight every day
 - Supplement vitamin B₁₂
- _____ 16. What is the most typical presentation of Alzheimer's disease?
- Loss of recent memory, poor judgment, difficulty with word-finding
 - Memory loss, paranoia, secondary tremor
 - Loss of recent and older memory, incontinence, combativeness
 - Difficulty in performing complex tasks, high risk of motor vehicle accidents, memory loss

Name: _____

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- _____ 22. What are some factors that most experts agree contribute to amyotrophic lateral sclerosis?
- Insufficient glutamate, too much dopamine
 - Atherosclerosis, untreated diabetes
 - Genetic predisposition, oxidative injury
 - Mitochondrial dysfunction, systemic inflammation
- _____ 23. What is the consequence of the nervous system damage that occurs with amyotrophic lateral sclerosis?
- Chronic sharp shooting electrical pain
 - Loss of intellectual capacity
 - Atrophy of skeletal muscles
 - Exaggerated anxiety, paranoia, and psychosis
- _____ 24. What is the most common form of amyotrophic lateral sclerosis in the United States?
- Sporadic
 - Mariana Islands-type
 - X-linked
 - Familial
- _____ 25. In what condition do early signs and symptoms often involve a loss of fine motor skills in the hands, or clumsiness and tripping over one's feet where symptoms gradually affect the proximal limbs, and ultimately the thorax?
- Parkinson's disease
 - Multiple sclerosis
 - Amyotrophic lateral sclerosis
 - Huntington's disease
- _____ 26. In the bulbar form of amyotrophic lateral sclerosis, cases first present as difficulties with what actions?
- Walking, climbing
 - Speaking, swallowing
 - Writing, typing
 - Sleeping, breathing
- _____ 27. Why is amyotrophic lateral sclerosis often a painful condition?
- The sensory neurons in the peripheral nervous system are under attack
 - This disease affects the areas dedicated to the interpretation of pain in the cortex
 - Muscle spasms, constipation, and the collapse of the body can be painful
 - The chemical attack on neurons in the spinal cord elicits a strong inflammatory reaction

Name: _____

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- _____ 32. Sometimes a person who has shingles develops a long-term complication called postherpetic neuralgia. One way to describe this situation is as a type of ...
- Peripheral neuropathy
 - Allodynia
 - Autoimmune disease
 - Neuroplasticity
- _____ 33. Thoracic outlet syndrome, trigeminal neuralgia, and herpes zoster could all be classified as types of ...
- Peripheral neuropathy
 - Central sensitization
 - Autoimmune disease
 - Neuroplasticity
- _____ 34. What are the factors that often lead to nerve damage seen with peripheral neuropathy?
- Genetic predisposition, cellular mutation, oxidation
 - Toxic exposures, neuroplasticity, deficiency in serotonin
 - Autoimmune disease, systemic inflammation, environmental toxins
 - Lack of circulation, chemical imbalance, trauma
- _____ 35. If peripheral neuropathy affects mainly sensory neurons, what are the most likely symptoms?
- Twitching, cramps, atrophy in the affected muscles
 - Problems with cognition, memory, and learning
 - Problems with digestive motility, heart rate, respiratory rate
 - Burning pain, paresthesia, numbness in the affected areas
- _____ 36. If peripheral neuropathy affects neurons that supply muscles, what are the most likely symptoms?
- Problems with digestive motility, heart rate, respiratory rate
 - Problems with cognition, memory, and learning
 - Twitching, cramps, atrophy in the affected muscles
 - Burning pain, paresthesia, numbness in the affected areas
- _____ 37. If peripheral neuropathy affects the autonomic motor neurons, what are the most likely symptoms?
- Twitching, cramps, atrophy in the affected muscles
 - Problems with cognition, memory, and learning
 - Problems with digestive motility, heart rate, respiratory rate
 - Burning pain, paresthesia, numbness in the affected areas

Name: _____

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- _____ 43. Cervical dystonia (spasms in the neck muscles) and blepharospasm (spasm of the orbicularis oculi) are examples of what kind of dystonia?
- Tardive dystonia
 - Multifocal dystonia
 - Focal dystonia
 - Segmental dystonia
- _____ 44. What type of dystonia affects muscles in disconnected parts of the body?
- Tardive dystonia
 - Multifocal dystonia
 - Segmental dystonia
 - Focal dystonia
- _____ 45. What situations tend to aggravate the signs and symptoms of dystonia?
- Extreme emotions, especially happiness or anger
 - Stress or fatigue
 - Having just woken up
 - Lack of exercise
- _____ 46. What feature distinguishes dystonia from other essential tremor or Parkinson's disease?
- Dystonia leads to muscle spasms in multiple planes; other tremors typically occur on a single plane of movement
 - Dystonia is seen almost entirely in men; Parkinson's disease and essential tremor are not gender-based
 - Dystonia is usually seen in people under 20 years old; Parkinson's disease and essential tremor are more common in mature people
 - Dystonia is usually seen along with sleep disorders and chronic fatigue syndrome; Parkinson's disease and essential tremor are more likely to be stand-alone conditions
- _____ 47. Your client has blepharospasm that makes it difficult to get through her day, and she wonders if massage therapy might help her. What is your best strategy?
- Check to see what others have done to help patients with blepharospasm, then create a treatment protocol that aims to reduce muscle spasm in the face and perceived stress overall
 - Blepharospasm and other facial tics tend to be exacerbated by massage therapy; only work in other areas of the body for this client
 - Ask permission to speak to her primary care provider; in that conversation ask the doctor for permission to work with his patient, and for suggestions about what to do
 - Refer her to a physical therapist; blepharospasm and other forms of dystonia are outside the scope of practice for massage therapists

Name: _____

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- _____ 53. What are the most common primary symptoms of Parkinson's disease?
- Resting tremor, bradykinesia, rigidity
 - Personality changes, loss of cognition, stiffness
 - Uncontrolled muscle spasms, insomnia, intention tremor
 - Fatigue, depression, anxiety
- _____ 54. What are the most common secondary symptoms of Parkinson's disease?
- Hyperkyphosis, poor postural reflexes, dystonia
 - Wandering gait, mental degeneration, emotional lability
 - Shuffling gait, rigidity of the speaking muscles, micrographia, depression
 - Progressive numbness in the extremities, osteoporosis, short-term memory loss
- _____ 55. Your new client is a 61-year-old man with Parkinson's disease. He shuffles when he walks, he is somewhat hunched over, and he doesn't sleep well. What accommodations might this client need?
- Clients with Parkinson's disease have limited sensation, especially in their extremities; work here must be extremely delicate
 - Clients with Parkinson's disease have difficulty with initiating movement; they may need help getting on and off the table
 - Clients with Parkinson's disease tend to be hypersensitive to hot and cold; this client is not a good candidate for hydrotherapy
 - Clients with Parkinson's disease may find that massage therapy triggers painful muscle spasms; it is important to avoid this risk
- _____ 56. People with Parkinson's disease often seek out massage therapy. Why?
- Massage therapy can decrease muscle spasms and tremors that limit the quality of life for Parkinson's disease patients
 - Massage therapy can help with constipation, muscle strength, pain, tremor, and other symptoms of Parkinson's disease, with little inherent risk
 - Massage therapy compares favorably to pharmacology, deep brain stimulation, and surgery to manage Parkinson's disease symptoms
 - Massage therapy can help to reestablish motor centers in the basal ganglia, leading to a decrease in Parkinson's disease symptoms
- _____ 57. What is a reasonable claim that can be made about massage therapy in the context of Parkinson's disease?
- Massage therapy may improve muscle tone and reflexes, preventing falls for Parkinson's disease patients
 - Massage therapy may help to rebuild damaged cells in the brain that produce dopamine
 - Massage therapy may help improve the uptake of synthetic dopamine, allowing patients to use smaller doses
 - Massage therapy may help to improve symptoms including weakness, pain, and tremor

Name: _____

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64. Your client has been diagnosed with essential tremor. What is a reasonable expectation for how massage therapy may impact his condition?
- Massage therapy has been shown to relieve the symptoms of essential tremor after a series of at least 12 sessions
 - Massage therapy is effective enough to allow essential tremor patients to reduce the medication that they need
 - Because massage therapy seems to improve our ability to deal with stress, symptoms of stress-related essential tremor may be somewhat improved with massage therapy
 - Massage therapy is unlikely to have an impact directly on his essential tremor, but it could improve his general quality of life
65. Your client has recently developed a painless tremor in his right forearm. He would like you to try to reduce his symptoms. What is your best strategy?
- Work with him, but recommend that he have this situation diagnosed before your next session together, even if massage appears to improve his symptoms
 - Set some baseline measures for the severity of his tremor, schedule a series of sessions to work with his forearm muscles, and then take comparison measures to check the efficacy of your work
 - Agree to work with him on the condition that he consults your naturopath for options that will improve his general health
 - Refuse to work with him until he consults a primary care provider; undiagnosed tremor can be an indicator of an imminent medical emergency

ENCEPHALITIS

66. What is the best description of encephalitis?
- An infection of the brain, usually due to a virus
 - Inflammation of the brain due to congestion of cerebrospinal fluid
 - A highly contagious central nervous system infection spread by mosquitoes
 - An autoimmune attack on the meninges inside the cranium
67. Several different viruses can cause this condition, which can lead to brain damage, paralysis, or death. What is it?
- Meniere disease
 - Shingles
 - Bell's palsy
 - Encephalitis
68. What is the most common cause of encephalitis?
- A viral infection
 - A fungal infection
 - A bacterial infection
 - A prion infection

Name: _____

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HERPES ZOSTER

- _____ 74. What is the best description of herpes zoster?
- A complication of herpes simplex, leading to painful blisters on the skin
 - A viral infection of the brain and spinal cord that can cause a secondary rash
 - A synonym for chickenpox
 - An infection that causes blisters at the dendrites of sensory neurons in the skin
- _____ 75. What is the pathogen that causes herpes zoster?
- Varicella zoster virus
 - Cytomegalovirus
 - Human immunodeficiency virus
 - Herpes simplex virus
- _____ 76. How is varicella zoster usually spread?
- Through contact with an intimate fluid
 - Through kissing
 - Through direct contact with an open sore
 - Through mucus secretions of an infected person
- _____ 77. Most massage therapists are probably protected from contracting herpes zoster from a client. Why?
- We reschedule clients who are sick or who have open sores
 - Most people have been exposed to varicella zoster virus by the time they reach adulthood, so they already have immune system protection from this infection
 - Herpes zoster is only communicable during childhood
 - Most massage therapists contract herpes zoster in their first few months of practice, which provides lifelong immunity thereafter
- _____ 78. A person's first encounter with herpes zoster usually takes the form of what condition?
- Rubella
 - Shingles
 - Chickenpox
 - Measles
- _____ 79. When a person has a childhood bout of chickenpox, and the virus reactivates later in life as painful blisters in a well-defined stripe, what is this called?
- Postherpetic neuralgia
 - Shingles
 - Purpura fulminans
 - Cowpox
- _____ 80. What is a common complication associated with shingles?
- Postherpetic neuralgia
 - Chickenpox
 - Secondary bacterial infection
 - Bell's palsy

Name: _____

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MENINGITIS

- _____ 86. What is the best description of meningitis?
- Inflammation of the meninges: usually the pia mater and arachnoid layers
 - Bacterial infection of the central nervous system
 - Viral infection of the central nervous system
 - Inflammation of the meninges and brain tissue
- _____ 87. This condition involves a bacterial or viral infection of the central nervous system. It can be mild or life-threatening. What is it?
- Herpes simplex
 - Shingles
 - Meningitis
 - Post polio syndrome
- _____ 88. How is meningitis distinguished from encephalitis?
- Meningitis involves a rash; encephalitis involves a stiff neck
 - Meningitis is most common in young adults; encephalitis is usually seen in very young or elderly people
 - Meningitis can be viral or bacterial; encephalitis is only bacterial
 - Meningitis affects only the meninges, not nerve tissue
- _____ 89. What are the pathogens most often seen to cause meningitis infections?
- Paramecia carried by mosquitoes
 - Bacteria and viruses
 - Fleas and ticks
 - Fungi and prions
- _____ 90. What are some possible consequences of pathogenic infection in the central nervous system?
- Hypersensitivity of the cranial nerves, hyperacusis, perilymph fistula
 - Chronic inflammation and tissue irritation, which increases the risk for cancer
 - Increased permeability of the blood-brain-barrier, cerebral edema, intracranial pressure
 - The invasion of scar tissue, which can interfere with parenchymal cell activity
- _____ 91. If a person has meningitis, what signs and symptoms are most likely to be present?
- Headache, drowsiness, cerebrospinal fluid leakage from the ears and nose
 - Progressive muscle weakness, fatigue, depression
 - High fever, stiff neck, purple rash
 - Extremely painful blisters on a red base that follow the line of the infected dermatome

Name: _____

ID: A

POLIO, POSTPOLIO SYNDROME

- _____ 96. What is the best description of polio?
- A viral infection that first targets intestinal mucosa, and then motor nerve cells in the spinal cord
 - A viral infection picked up through lesions on the feet that invades motor neurons from the lower extremity and works its way up the body
 - An autoimmune disease, usually developed in childhood, that targets motor neurons of the lower extremity
 - A genetic disorder involving vulnerability to viral infections of the central nervous system
- _____ 97. What is the best description of postpolio syndrome?
- A progressive chronic pain syndrome involving changes in the sensory neurons of the lower extremities
 - A resurgence of poliovirus activity in a person who has been infected
 - A form of fibromyalgia syndrome that is seen exclusively among the polio survivors
 - A progressive muscular weakness that develops decades after an initial polio infection
- _____ 98. What is the causative agent in polio?
- A virus that is most efficiently spread through oral fecal contamination
 - An autoimmune attack that specifically targets motor neurons in the muscles of the lower extremities
 - A bacterium that is also associated with a high risk of spinal meningitis and encephalitis
 - A fungus that is spread from one person to another by way of a fomite
- _____ 99. What is the most commonly understood process that leads to postpolio syndrome?
- Motor nerve cells that have survived an initial polio attack supply extra muscle cells. Eventually they wear out and die, leading to muscle weakness
 - A person who was infected with polio in childhood is re-exposed to the virus through contact with unvaccinated children, and experiences a substantial relapse
 - Long-term atrophy and leg muscles compresses local motor neurons, causing them to collapse and die
 - Sensory nerve cells that have survived an initial polio attack supply extra skin regions. Eventually they wear out and die, leading to patches of numbness
- _____ 100. What the signs and symptoms most common to post-polio syndrome?
- A sudden onset of pain, fatigue, and low stamina
 - A gradual onset of weakness, hypersensitivity in the skin, fatigue
 - Headache, fever, muscle weakness
 - Nausea, vomiting, diarrhea

Name: _____

ID: A

- _____ 105. What is the best description of physical addiction?
- A person uses a substance because she can't stand the symptoms of withdrawal
 - A person uses a substance because she thinks it will make people like her
 - A person uses a substance because she wants to expand her consciousness
 - A person uses a substance because she likes how it makes her feel
- _____ 106. What is the best description of psychological addiction?
- A person uses a substance because she thinks it will make people like her
 - A person uses a substance because she can't stand the symptoms of withdrawal
 - A person uses a substance because she likes how it makes her feel
 - A person uses a substance because she wants to expand her consciousness
- _____ 107. What are some common risk factors for substance abuse and addiction?
- Cultural expectations, gender, age
 - Gender, age, geographic location, socioeconomic standing
 - Race, gender, affluence, employment status
 - Underlying depression or anxiety; chronic pain; easy access; genetic predisposition
- _____ 108. What are some complications of long-term alcohol use?
- Hepatitis B, ulcerative colitis, atherosclerosis
 - Excessive gastric mucus, extreme allergic reactions, vulnerability to pneumonia
 - Cirrhosis, pancreatitis, brain damage
 - Hemorrhagic stroke, bradycardia, slowed reflexes
- _____ 109. The major signs and symptoms of addiction include the following:
- Lack of control of fidgeting, itching, irritability
 - Unkempt appearance, poor hygiene, easy distraction
 - Craving, lack of voluntary control of substance, increased tolerance
 - Facial tics, restlessness, irritability
- _____ 110. What are major signs and symptoms of someone in drug withdrawal?
- Pain, vomiting, seizures
 - Stroke, weakness, hemiparesis
 - Fever, confusion, aphasia
 - Headache, irritability, drowsiness

- _____ 116. Panic disorder is recognized when ...
- Panic attacks are so subtle that only a doctor can recognize them
 - Panic attacks occur repeatedly
 - Panic attacks occur in a person over 50 years old
 - Panic attacks are severe enough to mimic heart attack
- _____ 117. What is another term for social phobia?
- Agoraphobia
 - Pathologic shyness
 - Social anxiety disorder
 - Confidence deficit disorder
- _____ 118. Which of the following symptoms is common to most forms of anxiety disorders?
- Attempts to control the environment through ritualistic movements and actions
 - Vacillating back and forth between fear and arousal reactions to the environment
 - Worry about money, food, or global climate change
 - Illogical fears with sympathetic nervous system responses
- _____ 119. What is a possible adverse effect that could happen for a client with generalized anxiety disorder (GAD) who receives massage therapy?
- The client falls in love with the therapist in a case of transference
 - A careless remark about a mole suggests to the client that she has skin cancer
 - The therapist falls in love with the client in a case of countertransference
 - The massage causes bruising related to drugs that treat GAD
- _____ 120. Your client has been diagnosed with general anxiety disorder, and her doctor feels that receiving massage might be very useful for her. What is a realistic suggestion about how massage therapy might affect her?
- Massage therapy shows a lot of promise for many people with GAD; it is a low-risk way to help to manage a complicated problem
 - Massage therapy can be helpful for people with general anxiety disorder, but only if they commit to a minimum of 12 sessions
 - Massage therapy compares favorably with talk therapy and pharmacotherapy to manage general anxiety disorder symptoms
 - Massage therapy hasn't been studied in the context of anxiety disorders, but in your experience it is very effective

126. Your client is an adult diagnosed with attention deficit hyperactivity disorder. She doesn't sleep well, and she would like to have better focus and concentration at work. She wonders if massage therapy might help her. What is your best strategy?
- Adjust your work to the strength of her medication: the stronger the medication, the less massage therapy she can tolerate
 - Work with her using only light touch; firm pressure is too stimulating for most people with ADHD
 - Work with this client normally, but be prepared to adjust the amount of time you spend to her preference; massage therapy has no other risks in this situation
 - Assure her that massage therapy can help her if she commits to a minimum of 20 sessions

AUTISM SPECTRUM DISORDER

127. Which of the following conditions is a developmental disorder involving problems with interpersonal interaction, communication, and learning?
- Bipolar disease
 - Obsessive-compulsive disorder
 - Autism spectrum disorder
 - Attention deficit hyperactivity disorder
128. Which of the following is the best description of the currently understood pathophysiology of autism spectrum disorder?
- Sometimes linked to a genetic anomaly, but often idiopathic
 - The result of touch deprivation and lack of maternal connection in early infancy
 - Triggered by early childhood vaccines tainted with mercury
 - Caused by problems in the dopamine pathways of the frontal cortex centers for decision-making
129. Which of the following is the label that refers to people at the high-functioning end of the autism spectrum, although they may be significantly impaired in some skills?
- Autistic disorder
 - Sensory processing disorder
 - Asperger's syndrome
 - Pervasive development disorder
130. The three major issues seen with people with autistic disorder are ...
- Problems with uncontrolled movements; poor impulse control; easy distractibility
 - Deficits in verbal and nonverbal communication; poor social interactions; repetitive behaviors
 - Unusual reactions to tactile stimuli; poor impulse control; unable to interpret nonverbal communication
 - Problems with mood regulation; verbal and facial tics; poor communication skills

Name: _____

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- _____ 136. Bipolar disease appears in several varieties. Which of the following refers to the most common form—one in which a person experiences a manic episode that lasts at least one week and a depressive episode that lasts at least two weeks?
- Bipolar type I
 - Bipolar type II
 - Cyclothymia
 - Rapid cycling bipolar disorder
- _____ 137. This type of bipolar disease involves weeks-long swings from mild depression to hypomania, but no psychosis or other kinds of impairment. What is it?
- Bipolar type II
 - Bipolar type I
 - Cyclothymia
 - Rapid cycling bipolar disorder
- _____ 138. What type of bipolar disease involves years-long swings from mild depression to hypomania, but no psychosis or other kinds of impairment.?
- Bipolar type II
 - Rapid cycling bipolar disorder
 - Bipolar type I
 - Cyclothymia
- _____ 139. When a person with bipolar disorder suddenly retreats into privacy, cancels appointments, and doesn't go to work, what is a likely situation?
- He has entered a dysthymic phase
 - He has entered a depressive phase
 - He has entered a type II phase
 - He has entered a manic phase
- _____ 140. When a person with bipolar disorder becomes profoundly inspired by a project to the point of being agitated and irritable if he is interrupted, and he stays up around the clock and skips work to invest time in his venture, what is a likely situation?
- He has entered a dysthymic phase
 - He has entered a depressive phase
 - He has entered a manic phase
 - He has entered a balanced mood phase

Name: _____

ID: A

- _____ 145. One of the factors in depression appears to be dysfunction in the HPA axis. What does the HPA axis help us do?
- Normalize our neurotransmitter secretion
 - Regulate our mood
 - Normalize our hormone secretion
 - Regulate our stress response
- _____ 146. What is the most serious complication typically related to major depressive disorder?
- Attempted harm to others
 - Attempted harm to self
 - Enforced isolation that harms important relationships
 - Engaging in high-risk behaviors
- _____ 147. People with depression appear also to be at increased risk for ...
- Osteoporosis and spontaneous fractures
 - Autoimmune disease
 - Chronic fatigue syndrome
 - Cardiovascular disease
- _____ 148. If a person with depression also has a chronic underlying condition, what is likely to happen?
- Depression and other diseases make each other worse in a vicious circle; this person may need hospitalization
 - Nothing: depression and other conditions are free-standing and do not influence each other
 - Aspects of the underlying condition may improve, as depression takes precedence in symptomatic attention
 - Aspects of the underlying condition will worsen, as depression often leads to poor self-care
- _____ 149. What is the term used to describe the most common and most severe form of depression?
- Persistent depressive disorder
 - Psychotic depressive disorder
 - Major depressive disorder
 - Seasonal affective disorder
- _____ 150. What type of depression is sometimes called dysthymia and is a less severe form of the condition, but can last for years at a time?
- Minor depressive disorder
 - Persistent depressive disorder
 - Major depressive disorder
 - Seasonal affective disorder

Name: _____

ID: A

- _____ 156. What is a feature common to most patients with eating disorders?
- A sense of responsibility to make all things perfect
 - A sense that things will never get better
 - A sense of lack of control in their environment
 - A sense that everyone else is better than they are
- _____ 157. A person with a long history of anorexia is at increased risk for which problems?
- Slow heart rate, early-onset osteoporosis, tooth damage
 - Fast heart rate, heavy periods, anemia
 - Ulcerative colitis, Crohn's disease, irritable bowel syndrome
 - Iron deficiency, calcium deficiency, vitamin D deficiency
- _____ 158. What are some of the emotional complications often seen with eating disorders?
- Depression, sleep disorders, anxiety disorders
 - Seasonal affective disorder, dysthymia, cyclothymia
 - PTSD, bipolar disorder, ADHD
 - Panic disorder, social phobia, Asperger's syndrome
- _____ 159. Which of the following is the best description of anorexia?
- Self-starvation through limiting food to only that which meets a high standard of purity
 - Self-starvation through limiting food, excessive exercise, or both
 - "Ox-eating": alternating binges on treats, and purging with exercise, fasting, or medication
 - Over-eating in acute, severe cycles that are marked by a sense of loss of control and distress
- _____ 160. Which of the following is the best description of bulimia?
- Self-starvation through limiting food, excessive exercise, or both
 - Self-starvation through limiting food to only that which meets a high standard of purity
 - "Ox-eating": alternating binges on treats, and purging with exercise, fasting, or medication
 - Over-eating in acute, severe cycles that are marked by a sense of loss of control and distress
- _____ 161. Which of the following is the best description of binge-eating disorder?
- Self-starvation through limiting food to only that which meets a high standard of purity
 - "Ox-eating": alternating binges on treats, and purging with exercise, fasting, or medication
 - Over-eating in acute, severe cycles that are marked by a sense of loss of control and distress
 - Self-starvation through limiting food, excessive exercise, or both

OBSESSIVE-COMPULSIVE AND RELATED DISORDERS

- _____ 167. What is the best description of obsessive-compulsive and related conditions?
- A group of conditions that are triggered by a traumatic experience, and followed by actions to control memories of that experience
 - A group of conditions that involve cycling back and forth in mood states
 - A group of conditions involving perceptions of guilt and self-disappointment, an attempt to limit behaviors to mitigate guilt
 - A group of conditions involving focus on an unwelcome topic, and attempts to manage that focus
- _____ 168. OCD and related disorders are probably brought about by ...
- Prenatal exposure to toxins
 - Incomplete nutrition and vitamin deficiency
 - Genetics and and/or neurotransmitter imbalance
 - Hormonal fluctuations
- _____ 169. What are some common topics of obsession for people with OCD?
- Keeping possessions, fear of financial mismanagement, eating healthily
 - Fear of being judged, fear of sexual activity, a need to keep hands clean
 - Hygiene, fear of committing a violent act, a need to impose symmetry
 - Falling off of high places, being in confined places, fear of being robbed
- _____ 170. Which of the following is the list of behaviors that are categorized as subtypes of obsessive-compulsive and related disorders?
- Eating non-food items, i.e., toothpaste, pencil erasers
 - Hair-pulling, hoarding, skin-picking
 - Obsessively healthy eating, pathologically frequent bathing
 - Nose-picking, nail-biting
- _____ 171. The two major symptomatic patterns for obsessive-compulsive disorder are ...
- Focus on mathematical patterns in the environment; behaviors designed to identify those patterns
 - Consuming anxiety; isolation from public settings
 - Pervasive guilt and self disappointment; behaviors designed for self-punishment
 - Intrusive, uncontrollable thoughts; rituals to try to control those thoughts
- _____ 172. You have a new client who reports that he has obsessive-compulsive disorder. What are some accommodations that you might anticipate needing to make for him?
- This client needs clearance from his psychiatrist to receive massage, because the interaction between massage therapy and his medication may be problematic
 - This client may express concerns about hygiene in your session room; it is important for his questions to be answered thoroughly
 - This client will derive the best benefit from massage therapy if he skips his medication on the day of his appointment
 - This client is unlikely to have any special needs to receive massage

- _____ 179. Your new client is in treatment for PTSD arising from a traumatic event that happened several months ago. She is quiet and not very responsive to your greeting. What accommodations might you need to make for her?
- Encourage her to describe her trauma in detail so that you can understand what she's been through; then design a session that focuses on any physical repercussions of that event
 - Ask her to silently process her emotions as you work with her; pay attention to her breathing patterns to determine what areas need special attention
 - Ask her how you can promote her well-being for your time together, and listen to verbal and nonverbal signals about her comfort level
 - Encourage her to think about other things as she receives massage, then give her a treatment as usual while chatting about light-hearted topics
- _____ 180. You notice mid-session that your client has become tense and very quiet. He is awake, but does not respond to your questions. His breathing is shallow and rapid. What is your best response?
- Continue working, but begin chatting about light-hearted topics so he can focus on things that are not threatening
 - Stop the massage, make eye contact with him, and speak softly until he returns to responsiveness. Then determine whether it is appropriate to continue
 - Keep working as usual; to stop will only embarrass him and make him more upset
 - Work more slowly and more deeply in the area where he began to "tune out"—this is a sign that he is close to a much-needed emotional release
- _____ 181. What determines whether massage therapy is appropriate for a person with a trauma or stressor-related disorder?
- Whether he or she has other conditions that influence massage therapy choices
 - Whether he or she is under a doctor's care
 - Whether he or she is under the influence of drugs at the time of the appointment
 - Whether he or she feels safe

BELL'S PALSY

- _____ 182. Which of the following conditions involves damage to Cranial Nerve VII, the main motor nerve for the face?
- TMJ disorder
 - Otitis media
 - Trigeminal neuralgia
 - Bell's palsy
- _____ 183. If a person has Bell's palsy, it can be said that he has a type of ...
- Peripheral neuropathy
 - Spastic neuralgia
 - Facial paresis
 - Postherpetic neuralgia

COMPLEX REGIONAL PAIN SYNDROME

- _____ 189. Complex regional pain syndrome involves abnormal pain experiences due to ...
- Constant irritation from internal or external stimulation of local nerves
 - Inflammation of a specific peripheral nerve where it is entrapped or stretched by tight fascia
 - Structural changes in the nervous system that make one more sensitive to pain and less able to filter it out
 - The secretion of too much substance P and nerve growth factor at the site of nerve endings in the skin
- _____ 190. Complex regional pain syndrome is marked by sensory overload, especially ...
- Hyperalgesia and allodynia
 - Visceral pain that is a reaction to peripheral irritation
 - Referred pain to distant areas of the body
 - Migraine headaches that accompany painful episodes
- _____ 191. Your new client was referred to you by her medical doctor. Her chronic regional pain syndrome is centered on her right foot and lower leg. She walks with a cane, and can barely tolerate the pressure of clothing on that part of her body. She would like to experience less pain in her day-to-day living. After you have fully reviewed her treatment and medication profile and consulted the research on massage for CRPS, what is your best strategy?
- Offer to leave her leg undraped on the table, but when it is time to work on that part of her body put the drape back on and work through it with some firmness
 - Work toward incremental improvement, always avoiding the risk of exacerbating her symptoms
 - Add some anti-inflammatory essential oils to your lotion, and massage her as you would any other client
 - Alternate hot and ice packs on her affected leg, while working with her postural and gait muscles that have developed compensatory distortion
- _____ 192. Your 72-year old client twisted his knee three months ago. He had it checked at the time, and it was not fractured, but it has not gone through a typical healing process. Instead, it is inflamed, red, and exquisitely painful. It also has less hair than the other leg. He shows no signs of fever or infection, but his entire leg is now extremely hypersensitive to touch and seems to be getting worse. He'd like to see if massage therapy could help him feel normal again. What is your best strategy?
- Heat and then stretch the affected leg to unlock the fascial restrictions that are causing his pain
 - Do skin rolling on the affected leg to loosen and improve nerve flow through the superficial fascia
 - Refer him to his primary care provider before giving him a massage; it could be something that needs immediate attention
 - Work with him within pain tolerance, focusing on the muscles that have had to adapt to his limping

- _____ 200. What happens during an episode of autonomic dysreflexia?
- A minor stimulus causes uncontrollable tremors
 - A minor stimulus leads to an exaggerated parasympathetic response
 - A minor stimulus leads to an exaggerated sympathetic response
 - A minor stimulus causes pain out of proportion to the injury
- _____ 201. Your client had a severe spinal cord injury at age 18. Now at 32 he is wheelchair-bound, with limited function from C5 down. He would like to receive massage therapy as part of an overall strategy to stay as healthy and functional as possible. What is your best strategy?
- Work specifically and firmly in the areas where sensation is compromised to help create an environment where those neurons could regenerate
 - Work within his comfort level; include the numb areas, but do not try to change the quality of the tissue there
 - Agree to work with him under the specific guidance of his neurologist, who can direct you in what areas to focus on
 - Agree to do massage, and work only on the areas that have full sensation; numb areas contraindicate massage because of the risk of inadvertent tissue damage
- _____ 202. What is a reasonable statement about the benefits of massage therapy for a person with spinal cord injury?
- Massage therapy has been shown to help speed recovery and lead to better overall outcomes for someone healing from a spinal cord injury
 - Massage therapy has been shown to help with pain, range of motion, and bowel function for this population
 - Massage therapy has been shown to be more effective than pain medication for spinal cord injury patients
 - Massage therapy has no risks for people with spinal cord injury, and it has many potential benefits
- _____ 203. Your 30-year old client was in a diving accident two years ago, and had a spinal cord laceration at C6. He has partial use of his arms, and wants to know if massage therapy could help him recover some of that function. What is your best strategy?
- Work within pain tolerance with his arms and hands, encouraging him to stretch and exercise the functioning muscles as much as possible to retain proprioceptive feedback systems
 - Delay your work until you can ask his neurologist what kind of work you should be doing with him
 - Work with his arms, and also deeply in his neck to restore function to the nerve roots at the intervertebral fossae
 - Work lightly with his arms and hands because the nerves that supply them are damaged and will not recover

Name: _____

ID: A

211. Someone who is having a stroke will probably show some combination of the following:
- Unilateral weakness; blurred vision; clumsiness; sudden headache
 - Confusion and disorientation; absence seizure; unilateral pain
 - Bleeding from the nose or ears; loss of hearing; head pain
 - Crushing chest pain; numbness in the arms; headache; nausea
212. A major stroke is most likely to cause ...
- Hemiplegia
 - Quadriplegia
 - Paraplegia
 - Tetraplegia
213. Your 82-year old client had a major stroke 10 years ago. She still has some weakness on her right side, but she is otherwise recovered. She is 5'5", and weighs about 110 lbs. She would like to receive massage to help with her back pain because she also has osteoporosis. What are your best options?
- Require a note from her primary care provider that clears her to receive massage in the context of both her osteoporosis and her history of stroke
 - Accommodate her fragility and possible weakness in getting on and off the table, make sure she is comfortably supported while she is lying down
 - Work only lightly on her right side, as she will have reduced sensation there
 - Work more deeply and specifically on her right side to boost circulation and muscle responsiveness
214. Your previously hale and hearty 70-year old client had a stroke last month. He has lost a lot of function on his left side. He is in physical therapy, but he would like to see if massage therapy might help as well. He is taking a blood thinner and medication to manage hypertension. What is your best option?
- Offer to do light massage until he is a full year out from his incident; at that point it will be safe to do regular massage therapy again
 - Work mainly on his right side, since that will now have provide the majority of his motor function; the risk of bruising is not significant in healthy tissues
 - Get his permission to consult with his PT, and then design a treatment strategy that coordinates with their goals for maximum possible recovery, while minimizing the risks of bruising due to his medication
 - Delay your sessions until he is finished with his physical therapy and no longer using medication so you don't over-treat or overwhelm his system

TRAUMATIC BRAIN INJURY

215. Which of the following conditions involves brain damage that is not due to any underlying disease?
- Traumatic brain injury
 - Migraine
 - Aneurysm
 - Stroke

Name: _____

ID: A

- _____ 222. What is another name for trigeminal neuralgia?
- Tic douloureux
 - Facial palsy
 - Ernest syndrome
 - Facial shingles
- _____ 223. A person with primary trigeminal neuralgia probably has ...
- A small artery wrapped around the trigeminal nerve
 - TMJ disorder on the affected side
 - A recent herpes infection that caused inflammation of the trigeminal nerve
 - An infected tooth on the affected side
- _____ 224. Trigeminal neuralgia is characterized by ...
- Tearing, runny nose, excessive saliva production on one side of the face
 - Muscular weakness on one side of the face
 - Jolts of electrical pain on one side of the face
 - Deep aching and encroaching numbness in the face
- _____ 225. Your client has trigeminal neuralgia. What accommodations might you have to make for her?
- She will want intra-oral work and focus on the anterior triangle of the neck
 - She will want deep, specific work on her jaw and around her eyes
 - She will probably not be comfortable lying prone; you may need to offer another option
 - She will probably not need any special accommodations
- _____ 226. Your client with trigeminal neuralgia wants to receive massage therapy, but not on her face. What areas will probably benefit her the most?
- Focus on her neck and shoulders; look for other lines of tension as necessary
 - Insist that working on her facial muscles is the only way she can get benefit from massage therapy; try to avoid stimulating a spasm
 - This condition is caused by referred pain from the rhomboids; seek out trigger points there and eradicate them
 - Do light work around her shoulders and neck, then deeper work in her paraspinals

CEREBRAL PALSY

- _____ 227. When a person experiences some level of brain damage between gestation and early infancy, this is a form of
- Seizure disorder
 - Spina bifida
 - Cerebral palsy
 - Cognitive disability

Name: _____

ID: A

235. Your client is a child with mixed cerebral palsy. He is 10 years old and he cannot speak clearly, but he is always happy to see you. What are some accommodations that this client needs?
- Extra-long sessions work better for this population than shorter ones
 - This client probably cannot tolerate rapid changes in external environment; avoid hydrotherapy applications
 - Set the table extra-low for easy access; work through the sheet to maintain appropriate contact
 - Special sensitivity to nonverbal signals about comfort; bodywork focus on muscle tone and proprioception
236. Your client is an adult with cerebral palsy. At age 37 she is ambulatory but easily fatigued. She wonders of massage therapy might be able to help her. What is a realistic answer to her question?
- No: Her condition contraindicates massage therapy because of the risk of secondary tissue damage
 - No: Her symptoms are due to a central nervous system injury that massage therapy cannot affect; it would be unethical to suggest that massage therapy might make a significant difference for her
 - Yes: With enough time, massage therapy can help restore function to nerves and atrophied muscle tissue
 - Yes: Massage therapy can help address some of the inefficiencies of movement that contribute to fatigue

FIBROMYALGIA

237. What is the best definition of fibromyalgia?
- A collection of signs and symptoms that center on uncontrolled pain and muscle spasms
 - An invisible chronic pain syndrome that is unique to young urban professionals
 - An autoimmune condition that leads to the destruction of mitochondria in skeletal muscle cells
 - A multifactorial condition involving chronic pain, neuroendocrine imbalance, and sleep disorders
238. What are some of the factors that appear to contribute to fibromyalgia?
- Peripheral neuritis that is a side effect of drug interactions
 - HPA axis dysfunction, lack of stage IV sleep, central sensitization
 - Sleep deprivation, untreated depression, obsessive-compulsive disorder
 - ATP energy crisis, demyelination of local neurons, unique referred pain patterns
239. Fibromyalgia is identified by ...
- Fatigue that is unrelieved by rest, occasional digestive upset, extreme allergies
 - Central sensitization; pain that begins in one area but spreads from there
 - Sensitivity amplification, fatigue, mental foginess
 - Active and latent trigger points, referred pain, stiffness after rest

Name: _____

ID: A

- _____ 245. A person develops a certain kind of headache a few times a year. It is intense, one-sided, and comes and goes and comes back again for several days on end. It makes him restless; the pain seems less when he is active. What kind of headache is this likely to be?
- Secondary
 - Rebound
 - Cluster
 - Migraine
- _____ 246. Your client arrives with a headache that emerged as she was driving to your office; the traffic was bad and she was afraid she'd be late, and the stress means her head is pounding. Is massage therapy appropriate for her at this point?
- Yes: massage therapy is likely to have a very positive impact on the stress and muscular activity that have contributed to this situation
 - No: massage therapy should be delayed until she is not in acute pain
 - No: massage therapy should be delayed until she has been examined by a primary care physician
 - Yes: massage therapy can help her process her negative emotions and relieve the internal and external pressure that is causing her pain
- _____ 247. Your client arrives with a severe headache that suddenly hit her over the afternoon, along with some odd coordination problems. You notice that her speech is slightly slurred. Is massage therapy appropriate for her at this point?
- No: she is showing signs of an incipient infection and she should be home in bed
 - No: she is showing signs of a serious problem and needs to see a primary care provider quickly
 - Yes: massage therapy can help with headaches and muscle coordination
 - Yes: massage therapy can stop this process more quickly than leaving it alone