Practice Exam Questions

NASM
NATIONAL ACADEMY OF SPORTS MEDICINE

NASM-CPT

Certified Personal Trainer

EXAMKILLER

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Total Question: 813 QAs

Question No: 1
What best describes Maximal Oxygen Consumption (Vo2max)?
A. The difference between resting and maximal oxygen utilization
B. Level of stress an activity puts on the body
C. Excessive training that results in severe fatigue
D. The highest rate of oxygen use and transportation achieved during maximal physical exertion
Answer: D
Explanation: Maximum oxygen consumption (Vo2max) is the highest rate of oxygen use and transportation that is achieved during maximal physical exertion. It is not always practical to measure VO2 max because of equipment requirements, time involved, and willingness of client to perform at maximal physical capacity. Therefore, sub maximal tests, such as the YMCA 3 Minute Step Test, are often the preferred method to calculate appropriate training intensities.

Question No: 2
What is the purpose of using the Heart Rate Reserve (HRR) Method, also known as the Karvonen method?
A. To determine the amount of time someone should spend doing a particular exercise
B. To determine training intensity based on the difference between someone's predicted maximal heart rate and resting heart rate
C. To determine what level or stage of training to start a client at
D. To determine exercise intensity during training
Answer: B
Explanation: The purpose of using the Heart Rate Reserve Method is to determine training intensity based on the difference between someone's predicted maximal heart rate (MHR) and resting heart rate (RHR). Choosing a predetermined Target Heart Rate (THR) is the most widely utilized and accepted way of establishing training intensity. The following formula describes how to calculate this value: THR = [(HRmax - HRrest) x desired intensity] + HRrest.

Question No: 3
If during the overhead squat assessment, your client's feet turn out, what are the probable overactive muscles?
A. Tensor fascia latae (TFL)
B. Hip flexor complex
C. Lateral gastrocnemius
D. Erector spinae
Answer: C
Explanation: If your client's feet turn out during a squat assessment, it is likely that your client has an overactive lateral gastrocnemius. Other muscles that may be overactive include the soleus and biceps femoris (short head). Some stretches that could be used to correct this problem include self-myofascial release and static stretching of the gastrocnemius and soleus.

Question No: 4

If during an overhead squat assessment, you notice that your client's lower back arches, what is one of the probable underactive muscles?
A. Hip flexor complex
B. Gluteus maximus
C. Latissimus dorsi
D. Sternocleidomastoid
Answer: B
Explanation: The gluteus maximus is one of the probable underactive muscles if your client's lower back arches during an overhead squat assessment. Other underactive muscles could include the hamstring complex and intrinsic core stabilizers. Possible ways to correct this problem include self-myofascial release and static stretching of the quadriceps, latissimus dorsi, and hip flexor complex.

Question No: 5
What percentage of adults is affected by musculoskeletal lower back pain?
A. 16%
B. 33%
C. 70%
D. 80%
Answer: D
Explanation: Nearly 80% of all adults experience lower back pain, often due to long periods of time spent sitting in enclosed workspaces or from performing manual labor. Musculoskeletal pain commonly leads to muscular dysfunction and, consequently, injuries.

Question No: 6
During peak exertion, the maximum rate of oxygen use and transport, a measure of cardiorespiratory fitness, is known as what?
A. VO2 max
B. METs
C. SV
D. ATP
Answer: A
Explanation: VO2 max is the maximum rate of oxygen use and transport and measures cardiorespiratory fitness level. Though very difficult to test accurately, the Rockport Walk Test and the YMCA 3 Minute Step Test are good estimates of a client's VO2 max.

Question No: 7
What is a systematic way of observing a client's structural and functional status?
A. Diagnose conditions
B. Perform nutritional counseling
C. Fitness assessment
D. Variable selection
Answer: C
Explanation: A systematic way to observe a client's structural and functional status is a fitness assessment. This is a method of observation and data gathering by which the health and fitness professional can

determine the specific exercise needs of a client.

Question No: 8
What type of information is provided by a fitness assessment?
A. Information on medical history and health issues
B. Information about activity level, hobbies, and abilities
C. A representation of the client's goals and needs
D. All of the above
Answer: D
Explanation: Types of information provided by a fitness assessment are information about medical history, health issues, previous injuries of conditions, habits and hobbies, and an overall representation of the client's needs and goals. This allows the health and fitness professional to craft an individualized plan for the client.

Question No: 9
Which of the following tasks is not one that a health and fitness professional should perform for the client?
A. Use exercise to help client improve overall health
B. Provide general information on healthy nutrition and diet
C. Prescribe diets and specific supplements
D. Identify potential health risks through a thorough screening process
Answer: C
Explanation: A task that is not one that a health and fitness professional should perform for the client is to prescribe specific diets and supplements. Guidance may be provided on general dietary requirements, but for a specific diet plan, the client should be referred to a dietitian.

Question No: 10
Which of the following is subjective information derived from a fitness assessment?
A. Body composition
B. Occupation
C. Postural assessment
D. Cardiorespiratory assessment
Answer: B
Explanation: Occupation is subjective information derived from the fitness assessment. The other answer choices are objective and are data that can be actually measured in some way.

Question No: 11
What is the purpose of the Physical Activity Readiness Questionnaire, or PAR-Q?
A. Helps to detect cardiorespiratory dysfunction
B. Provides insight into movement capacity
C. Determines how active or lazy the client may be
D. Helps to measure any injury risks from repetitive movements
Answer: A
Explanation: The purpose of a the Physical Activity Readiness Questionnaire, or PAR-Q, is to identify from the very start of training a client whether or not there is evidence of cardiorespiratory dysfunction.

Question No: 12
What type of chronic lifestyle habit can lead to tight hip flexors and potentially result in postural imbalances?
A. Lifting heavy objects with poor form
B. Standing with slouching posture
C. Wearing high heels
D. Sitting for long periods of time such as at a desk for work
Answer: D
Explanation: A chronic lifestyle habit that can lead to tight hip flexors and potentially result in postural imbalances is sitting for long periods of time, such as at a desk for work. Long term sitting can also result in shoulder fatigue, which leads to the rounding of the shoulders.

Question No: 13
Which chronic occupational postural habit can lead to tightness in the gastrocnemius and soleus?
A. Wearing high heeled shoes
B. Long term sitting, like at a desk
C. Repetitive movements
D. Postural imbalances
Answer: A
Explanation: A chronic occupational postural habit that can lead to tightness in the gastrocnemius and soleus is wearing high heels. The foot is placed in plantarflexion for extended periods, leading to this tightness, which can then lead to significant postural imbalances.

Question No: 14
Of what importance is it to the health and fitness professional to learn information about a client's hobbies and recreational activities?
A. Helps to reveal possible dysfunctions
B. Knowing these facts allows individualization of an appropriate training plan to those specific lifestyle activities
C. Provides insight into levels of mental stress
D. Gives insight into the capacity for movement and also the frequency these movements are performed throughout the day
Answer: B
Explanation: It is important to the health and fitness professional to learn information about a client's hobbies and recreational activities in order to allow individualization of an appropriate training plan to those specific lifestyle activities. The training plan needs to optimize exercises helpful to the client's recreational habits to help prevent injury during these activities.

Question No: 15
Which of the following past injuries can lead to a decrease in neural control of the patella?
A. Ankle sprains
B. Lower back injuries
C. Knee injury involving ligaments
D. Shoulder injuries
Answer: C

Explanation: A past injury that can lead to a decrease in neural control of the patella is a knee injury involving ligaments. This type of injury prevents adequate stabilization of the patella by the related muscles.

Question No: 16
Which of the following past injuries can lead to a decrease in the neural control of stabilizing core muscles?
A. Ankle sprains
B. Lower back injuries
C. Shoulder injuries
D. Groin strains
Answer: B
Explanation: A past injury that can lead to a decrease in the neural control of stabilizing core muscles is a lower back injury. This type of injury can result in instability in the spine, leading to further dysfunction of the limbs.

Question No: 17
Unless appropriate rehabilitation occurred, which of the following conditions can lead to postural and joint dysfunction?
A. Chronic conditions
B. Medication
C. Obesity
D. Past surgeries
Answer: D
Explanation: Unless appropriate rehabilitation occurred, the condition that can lead to postural and joint dysfunction is past surgery. Surgeries can affect the body in a manner similar to previous injuries if not rehabilitated, causing inflammation, neural deficiency, weakness, and dysfunction.

Question No: 18
Which of the following is not a chronic condition?
A. Cardiovascular disease
B. Obesity
C. Plantar fasciitis
D. Diabetes mellitus
Answer: C
Explanation: Plantar fasciitis is not a chronic condition, but a previous injury. The other conditions are considered to be chronic or long term conditions.

Question No: 19
Which of the following is the effect that Beta-blockers have on heart rate and blood pressure?
A. Increased heart rate, increased blood pressure
B. Increased heart rate, decreased blood pressure
C. Decreased heat rate, decreased blood pressure
D. Decreased heart rate, increased blood pressure
Answer: C
Explanation: The effect that Beta-blockers have is to decrease heart rate and blood pressure. It is important

for the health and fitness professional to know this in order to understand possible physiological effects that may result and affect the client's ability to perform certain activities.

Question No: 20
What is the best method for the client to determine their resting heart rate?
A. Check their heart rate upon waking for three mornings in a row and take the average
B. Make an appointment to visit their healthcare provider for readings
C. Compare heart before and after strenuous physical activity
D. Calculate it based on body temperature and number of calories consumed the previous day
Answer: A
Explanation: The best method for the client to determine their resting heart rate is to check their heart rate upon waking for three mornings in a row and take the average. This can be performed using the radial or carotid pulse.

Question No: 21
What is the average resting heart rate for a male and for a female?
A. Heart rates vary and there can be no average
B. 75 bpm, 80 bpm
C. 75 bpm, 70 bpm
D. 70 bpm, 75 bpm
Answer: D
Explanation: The average resting heart rate for a male is 70 beats per minute (bpm) and 75 beats per minute (bpm) for a female.

Question No: 22
Which of the following is a normal blood pressure measurement?
A. Diastolic of 120 to 130 mm Hg and systolic of 80 to 85 mm Hg
B. Systolic of 120 to 130 mm Hg and diastolic of 80 to 85 mm Hg
C. Diastolic of 100 to 120 mm Hg and systolic of 140 to 160 mm Hg
D. Systolic of 100 to 120 mm Hg and diastolic of 140 to 160 mm Hg
Answer: B
Explanation: A normal blood pressure measurement is systolic of 120 to 130 mm Hg and diastolic of 80 to 85 mm Hg. Blood pressure indicates the pressure produced by the heart while pumping and the minimal pressure within arteries through a full cardiac cycle.

Question No: 23
What method is not used to determine body fat measurements?
A. Skin-fold caliper
B. Ultrasound
C. Bioelectric impedance
D. Underwater weighing
Answer: B
Explanation: A method that is not used to determine body fat measurements is an ultrasound. Body fat measurement is a very helpful tool in helping a client to determine measurable goals for their fitness

program.

Question No: 24
The Durnin-Womersley method uses which body locations?
A. Biceps, triceps, cervical, iliac crest
B. Biceps, triceps, subscapular, iliac crest
C. Triceps, deltoids, subscapular, iliac crest
D. Triceps, subscapular, iliac crest, cervical
Answer: B
Explanation: The Durnin-Womersley method uses the biceps, triceps, subscapular, and iliac crest for body fat measurements. These measurements should all be taken twice on the right side of the body and measured in millimeters.

Question No: 25
The best location for an accurate waist measurement is where?
A. At the narrowest point of the waist
B. At the widest point of the waist
C. Three inches above the navel
D. Three inches below the navel
Answer: A
Explanation: The best location for an accurate waist measurement is at the narrowest point of the waist. If there appears to be no place narrower than the rest, measure at the navel.

Question No: 26
Where is the best place to measure the biceps?
A. At the area with the smallest circumference, arm extended, deltoids relaxed
B. At the area with the smallest circumference, arm extended, deltoids contracted
C. At the area with the largest circumference, arm extended, palm downward
D. At the area with the largest circumference, arm extended, palm forward
Answer: D
Explanation: The best place to measure the biceps is at the area with the largest circumference, arm extended, and palm forward.

Question No: 27
What waist-to-hip ratio indicates a much higher risk for many diseases?
A. Above 0.95 for women and above 0.80 for men
B. Above 0.80 for women and above 0.95 for men
C. Above 0.65 for women and above 0.70 for men
D. Above 0.70 for women and above 0.65 for men
Answer: B
Explanation: The waist-to-hip ratio that indicates a much higher risk for many diseases is above 0.80 for women and above 0.95 for men. A high waist-to-hip ratio is indicative of excess fat stored in the mid-section, which correlates to many chronic disease conditions.

Question No: 28
At what BMI are the chances for obesity-related health problems increased?
A. Between 25 and 30
B. Between 20 and 25
C. Over 20
D. Over 25
Answer: D
Explanation: A BMI over 25 increases the chance for obesity-related health problems. As the BMI increases, the obesity classification does also and the client's weight becomes more and more inappropriate for their height.

Question No: 29
What is the correct mathematical equation for determining the body mass index?
A. Multiply body fat percentage by weight
B. Subtract client's weight from 222
C. Divide body weight by height, kg/m^2
D. Divide body height by weight, m^2/kg
Answer: C
Explanation: The correct mathematical equation for determining the body mass index is to divide body weight by height, kg/m^2. This provides a number that indicates whether or not the client's weight and height are appropriate and at a healthy level.

Question No: 30
What type of assessment is the YMCA Three-minute Step test?
A. Cardiorespiratory
B. Respiratory function
C. Agility
D. Overall fitness level
Answer: A
Explanation: The YMCA Three-minute Step test is a cardiorespiratory assessment used to determine a baseline of cardiorespiratory health in order to determine at what level to commence the training regimen.

Question No: 31
When performing the YMCA Three-minute Step test, how long is the client instructed to rest after the three minutes of stepping before their pulse is measured?
A. 3 minutes
B. 1 minute
C. 30 seconds
D. No wait, pulse is measured immediately
Answer: D
Explanation: When performing the YMCA Three-minute Step test, the client should be instructed to sit down immediately to have their pulse measured for one minute, starting measurement within five seconds of activity completion. This number is then inserted into an equation that determines in what cardiorespiratory zone the client will commence training.

Question No: 32
In what cardiorespiratory category will a client with a “good” result from the YMCA Three-minute Step test commence fitness training?
A. Zone One
B. Zone Two
C. Zone Three
D. Zone Four
Answer: B
Explanation: A client with a “good” result from the YMCA Three-minute Step test will commence fitness training at Zone Two. This measure of efficiency guides the health and fitness professional in planning what exercises should be included in the client’s cardiorespiratory training.

Question No: 33
After performing the Rockport Walk test for the cardiorespiratory assessment, how long should the client rest before the pulse is checked?
A. Three minutes
B. One minute
C. 30 seconds
D. No wait, check pulse immediately
Answer: D
Explanation: When performing the Rockport Walk test for the cardiorespiratory assessment, the client’s pulse should be checked immediately after walking the mile. The result is placed in an equation which results in a VO2 score and then indicates a heart rate zone.

Question No: 34
What is the alignment and function of the kinetic chain components at any given moment?
A. Posture
B. Balance
C. Equilibrium
D. Strength
Answer: A
Explanation: The alignment and function of the kinetic chain components at any given moment is called posture. Good posture is the key to maintaining a good center of gravity over a support base.

Question No: 35
What is the ability of the neuromuscular system to monitor and control the level of stress on the kinetic chain during functional tasks?
A. Structural efficiency
B. Neuromuscular efficiency
C. Dynamic efficiency
D. Functional efficiency
Answer: D
Explanation: The ability of the neuromuscular system to monitor and control the level of stress on the kinetic

chain during functional tasks is called functional efficiency. The neuromuscular system can monitor and manipulate movement using the least amount of energy and consequently cause the least stress.

Question No: 36
The ability of the neuromuscular system to perform all three action types (eccentric, concentric, and isometric) in all planes of motion is defined as what?
A. Musculoskeletal strength
B. Neuromuscular strength
C. Functional strength
D. Structural strength
Answer: C
Explanation: The ability of the neuromuscular system to perform all three action types (eccentric, concentric, and isometric) in all planes of motion is defined as functional strength. This ensures optimal neuromuscular efficiency through proper postural alignment.

Question No: 37
What are predictable patterns of muscle imbalance?
A. Dynamic distortion patterns
B. Postural distortion patterns
C. Myofascial distortion
D. Muscle fiber distortion
Answer: B
Explanation: Predictable patterns of muscle imbalance are called postural distortion patterns. Improper posture leads to muscle imbalances and thus altered movement patterns, which causes undue stress to joints.

Question No: 38
What information can be derived from dynamic postural observations?
A. The presence of muscular deformities
B. Whether or not the client has followed a stretching regimen
C. The presence of over- and under-active muscles in their naturally dynamic setting
D. How successful the client has been in maintaining good dietary nutrition
Answer: C
Explanation: The presence of over- and under-active muscles in their naturally dynamic setting can be derived from dynamic postural observations. These are simply made by observing the client in motion doing specific actions that reveal information about their movement patterns.

Question No: 39
Which dynamic postural assessment assesses total integrated body strength and bilateral dynamic flexibility?
A. Overhead squat assessment
B. Single leg squat assessment
C. Pushing assessment
D. Pulling assessment
Answer: A

Explanation: The dynamic postural assessment that assesses total integrated body strength and bilateral dynamic flexibility is the overhead squat assessment. This is done by observing what movements, both correct and incorrect, the body reveals upon performing the overhead squat.

Question No: 40
If a client's feet turn outward during the overhead squat assessment, which muscle is likely underactive?
A. Soleus
B. Biceps femoris
C. Vastus lateralis
D. Medial hamstring
Answer: D
Explanation: If a client's feet turn outward during the overhead squat assessment, the medial hamstring is most likely underactive. When this muscle is underactive, the LPHC may also exhibit lower back arches.

Question No: 41
During an overhead squat assessment, the client's arms fall forward. Which muscle may be overactive?
A. Biceps femoris
B. Latissimus dorsi
C. Deltoid complex
D. Erector spinae
Answer: B
Explanation: During an overhead squat assessment, if the client's arms fall forward, it is likely that the Latissimus dorsi is overactive. This assessment is made by observing the upper body during the overhead squat.

Question No: 42
Which dynamic postural assessment reveals ankle proprioception, core strength, and hip stability?
A. Single leg squat assessment
B. Overhead squat assessment
C. Pushing assessment
D. Walking lunge assessment
Answer: A
Explanation: The dynamic postural assessment that reveals ankle proprioception, core strength, and hip stability is the single leg squat. For some clients, this assessment may be too difficult to perform and other methods of assessing movement compensations must be performed.

Question No: 43
During the single leg squat assessment, if the client's knee moves inward, which muscle may be underactive?
A. Adductor complex
B. Vastus lateralis
C. Gluteal muscles
D. Biceps femoris
Answer: C
Explanation: During the single leg squat assessment, if the client's knee moves inward, the gluteal muscles

may be underactive.

Question No: 44
While observing the lumbo-pelvic hip complex during the pushing assessment, arching of the lower back is indicative of what?
A. Overactive hip flexors
B. Underactive erector spinae
C. Overactive core stabilizers
D. Underactive hip flexors
Answer: A
Explanation: While observing the lumbo-pelvic hip complex during the pushing assessment, arching of the lower back is indicative of overactive hip flexors. This assessment can be viewed from a lateral aspect as the client performs pushing reps in a controlled manner.

Question No: 45
During a pushing assessment, underactive deep cervical flexors are indicated by what inappropriate kinetic chain motion?
A. Arching in the lower back
B. Shoulders elevating
C. Head protruding forward
D. Elbows turning outward
Answer: C
Explanation: During a pushing assessment, underactive deep cervical flexors are indicated by the head protruding forward. This compensation also may indicate overactive upper trapezius, sternocleidomastoid, and levator scapulae.

Question No: 46
Performance assessments are used for what purpose?
A. To measure endurance and strength in the everyday casual weight lifter
B. To measure muscular hypertrophy in the power phase of the OPT model
C. To measure neuromuscular efficiency in the elderly
D. To measure stability, agility, and strength in clients trying to improve athletic performance
Answer: D
Explanation: Performance assessments are used to measure stability, agility, and strength in clients trying to improve athletic performance. They are not suitable for all individuals.

Question No: 47
The Davies test assesses which of the following?
A. Overall fitness level in competitive athletes
B. Whole-body proprioception
C. Lower extremity agility and stabilization
D. Upper extremity agility and stabilization
Answer: D
Explanation: The Davies test assesses upper extremity agility and stabilization. It is not appropriate for those

lacking shoulder stability.

Question No: 48
Which performance assessment is used to test lower extremity agility and neuromuscular control?
A. Davies test
B. Shark skill test
C. Bench press
D. Squat test
Answer: B
Explanation: The performance assessment used to test lower extremity agility and neuromuscular control is the Shark skill test. This test is not appropriate for all clients because it is a progression from the single leg squat.

Question No: 49
During the squat for the lower extremity strength assessment, how many pounds are added each time following the rest period?
A. 5 to 10
B. 20 to 35
C. 30 to 40
D. 40 to 50
Answer: C
Explanation: During the squat for the lower extremity strength assessment, 30 to 40 pounds are added each time following the rest period. This addition of weight continues throughout the test until the client reaches failure in performing three to five repetitions.

Question No: 50
How many seconds are added for each fault during the Shark skills test?
A. 1.0
B. 0.50
C. 0.10
D. 0.05
Answer: C
Explanation: 0.10 seconds are added for each fault during the Shark skills test. Faults include letting the non-hopping leg touch the floor, hands coming off the hips, foot going into the wrong square, and foot not returning to the center square.

Question No: 51
During the upper extremity strength test, how many pounds are added to the bar for the bench press after the one minute rest?
A. 10 to 20
B. 20 to 30
C. 30 to 40
D. No additional weight should be added
Answer: A

Explanation: During the upper extremity strength test, 10 to 20 pounds are added to the bar for the bench press after the one minute rest. This weight should continue to be added until the client reaches failure in performing three to five repetitions.

Question No: 52
Which of the assessments listed below is an advanced assessment not suitable for all clients?
A. YMCA Three-minute Step test
B. Upper extremity strength-bench press
C. Overhead squat
D. Single leg squat
Answer: B
Explanation: The assessment listed that is an advanced assessment not suitable for all clients is the upper extremity strength-bench press. It is one of the performance assessments intended for more advanced athletic clients.

Question No: 53
A trainer has a female client who is 38-years-old, works as a secretary, likes to hike and garden, and experiences intermittent lower back pain. Which of the following assessments should the client not perform?
A. Overhead squat
B. Rockport walk test
C. Lower extremity strength
D. Body composition
Answer: C
Explanation: A female client who is 38 years old, works as a secretary, likes to hike and garden, and experiences intermittent lower back pain should not perform the lower extremity test. This assessment is designed for advanced athletic clients.

Question No: 54
A client who is 27-years-old, is a semi-pro athlete, has a history of knee surgery (5 years ago), and has a goal of increasing speed and agility during his sports performance. He is eligible for which of the following assessments?
A. YMCA Three-minute Step test
B. Shark skills test
C. Davies test
D. All the above
Answer: D
Explanation: A client who is 27-years-old, is a semi-pro athlete, has a history of knee surgery 5 years ago, and has a goal of increasing speed and agility during his sports performance is eligible for all of these assessments. Because he is an athlete and more physically well-honed than the average gym client, advanced testing is appropriate.

Question No: 55
When a client exhibits excessive forward lean while performing the overhead squat test, which muscles are likely to be overactive?

A. Gluteus maximus
B. Erector spinae
C. Anterior tibialis
D. Abdominal complex
Answer: D
Explanation: When a client exhibits excessive forward lean while performing the overhead squat test, muscles of the abdominal complex are likely to be overactive.

Question No: 56
What is the purpose of the Rockport walk test?
A. To establish a cardiovascular baseline
B. To determine the clients VO2 max level
C. To introduce a client to the power phase of the OPT model
D. To check the heart rate
Answer: A
Explanation: The purpose of the Rockport walk test is to establish a cardiovascular baseline. This enables the health and fitness professional to start the client at the correct difficulty level for cardiovascular training.

Question No: 57
What measurements are used in establishing BMI?
A. Weight and cardiovascular level
B. Weight and height
C. Height and resting heart rate
D. Rest heart rate and level of blood oxygen
Answer: B
Explanation: Weight and height are used in establishing BMI. BMI is sometimes not the best indicator of obesity because it only takes into account these two measurements and no other factors such as body fat percentage or lean muscle mass.

Question No: 58
What is another name for repetitive motion injuries, or overuse injury of a specific muscle group?
A. Neuromuscular repetition
B. Pattern overload
C. Musculotendinous extensibility
D. Autogenic inhibitory response
Answer: B
Explanation: Another name for repetitive motion injuries, or overuse injury of a specific muscle group, is pattern overload. This places abnormal stress on the body, whether through gym routines or occupational motions, that are repeated over and over on a frequent or daily basis.

Question No: 59
What is the appropriate corrective exercise for a client whose arms fall forward during the overhead squat assessment?
A. Ball squats

B. Ball cobra
C. Squat to row
D. Keep head in neutral
Answer: C
Explanation: The appropriate corrective exercise for a client whose arms fall forward during the overhead squat assessment is a squat to row. This corrects probable underactive muscles such as the rotator cuff, rhomboids, and trapezius.

Question No: 60
Which movement assessment checkpoint benefits from stretching the hip flexor complex?
A. Lumbo-pelvic-hip complex
B. Knees
C. Feet
D. Upper body
Answer: A
Explanation: The movement assessment checkpoint that most benefits from stretching the hip flexor complex is the lumbo-pelvic-hip complex. This very complicated joint area connects so many areas of movement that making corrections to postural dysfunction or imbalances here is crucial to continue successful training.

Question No: 61
Which assessment result can indicate probable overactive tensor fascia latae?
A. Excessive forward lean during overhead squat
B. Feet turning outward during overhead squat
C. Knees falling inward during overhead squat
D. Shoulders elevate during pulling assessment
Answer: C
Explanation: The assessment result that can indicate probable overactive tensor fascia latae is observing the knees falling inward during the overhead squat. This can be corrected by tube walking.

Question No: 62
If the head moves forward during an assessment, which muscles are most likely underactive?
A. Trapezius
B. Levator scapulae
C. Erector spinae
D. Deep cervical flexors
Answer: D
Explanation: If the head moves forward during an assessment, the deep cervical flexors are most likely underactive. The client should be directed to keep the head in a neutral position while performing exercises.

Question No: 63
Which corrective exercise will help when a client exhibits a low back arch during an assessment?
A. Ball cobra
B. Ball squats

C. Squat to row
D. Lat pull-downs
Answer: B
Explanation: When a client exhibits a low back arch during an assessment, ball squats are the appropriate corrective exercise for this imbalance. This indicates probable overactive hip flexors, erector spinae, and latissimus dorsi.

Question No: 64
What compensation will not be seen in a client with a weak gluteus maximus muscle?
A. Knees fall inward during overhead squat
B. Feet turn out during overhead squat
C. Excessive forward lean during overhead squat
D. Low back arches during overhead squat
Answer: B
Explanation: All of these compensations could likely occur in a client with weak gluteus maximus muscles except the feet turning outward during the overhead squat. This compensation would indicate various other muscles being weak (popliteus, Sartorius, gracilis, medial gastrocnemius, and hamstrings), but not the gluteus maximus.

Question No: 65
The ball cobra is a corrective exercise for what compensation?
A. Arms falling forward during push/pull assessment
B. Elevated shoulders during push/pull assessment
C. Head protruding forward during push/pull assessment
D. Low back arches during overhead squat
Answer: B
Explanation: The ball cobra is a corrective exercise for elevated shoulders during push/pull assessment. This compensation indicates underactive trapezius, rhomboids, and rotator cuff.

Question No: 66
The single-leg balance reach is a corrective exercise for which compensation?
A. Feet turning out during overhead squat
B. Knees falling in during overhead squat
C. Excessive forward lean during overhead squat
D. Low back arches during overhead squat
Answer: A
Explanation: The single-leg balance reach is a corrective exercise for the feet turning out during overhead squat. Additionally, stretching the gastrocnemius, soleus, and short head of the biceps femoris will help.

Question No: 67
If a client has an underactive erector spinae, what compensation is likely to be observed?
A. Shoulders elevate during push/pull assessment
B. Head moves forward during push/pull assessment
C. Low back arches during overhead squat

D. Excessive forward lean during overhead squat
Answer: D
Explanation: If a client has an underactive erector spinae, an excessive forward lean during an overhead squat is likely to be observed. This imbalance can be overcome by performing ball squats.

Question No: 68
Underactive rhomboids can be presented as which compensation?
A. Arms fall forward during overhead squat
B. Shoulders elevate during push/pull assessment
C. Low back arches during overhead squat
D. Answer choices A and B
Answer: D
Explanation: Underactive rhomboids can be presented as the client's arms fall forward during an overhead squat and shoulders elevate during the push/pull assessment. Squat to row or ball cobra can help to correct this imbalance.

Question No: 69
Which of the following is a kinetic chain deviation indicating that stationary bikes should not be used during the initial phases of training?
A. Rounding of the shoulders
B. Feet turn outward
C. Anteriorly rotated pelvis
D. Protruding head
Answer: C
Explanation: A kinetic chain deviation indicating that stationary bikes should not be used during the initial phases of training is an anteriorly rotated pelvis. This is manifested by low back arches due to tight hip flexors. Hip flexors should be adequately stretched before and after exercise.

Question No: 70
Which description below indicates correct form and function while using exercise equipment?
A. Holding the support bars on the stair master for better balance
B. Leaning forward while walking on the treadmill with a very high level of incline for better caloric burn
C. Running the treadmill at as fast a rate as possible for better intensity
D. Sitting upright with straight shoulders on the stationary bike
Answer: D
Explanation: Sitting upright with straight shoulders on the stationary bike indicates correct form and function while using this piece of exercise equipment. The other answers indicate poor posture which will likely result in continued or worsened postural imbalances.

Question No: 71
What consists of the lumbo-pelvic-hip complex, thoracic, and cervical spine?
A. Core
B. Central nervous system
C. Torso

D. Reproductive system
Answer: A
Explanation: The core consists of the lumbo-pelvic-hip complex, thoracic, and cervical spine. These parts, along with all the associated soft tissues, make up the center of gravity and the place where all movements begin.

Question No: 72
What is primarily responsible for the stabilization of the lumbo-pelvic-hip complex?
A. Supraspinal muscles
B. Core movement system
C. Core stabilization system
D. Anterior and posterior abdominal structures
Answer: C
Explanation: The core stabilization system is primarily responsible for the stabilization of the lumbo-pelvic-hip complex. This is interdependent with the movement system of the core and should be trained first in any training program.

Question No: 73
What are some results of an improperly-trained core stabilization system?
A. Overactive neuromuscular control
B. Compensations, synergistic dominance, and inefficient movements
C. Increase in strength of the movement system
D. Improved balance while moving, resting, and functioning throughout slow, concentrated exercises
Answer: B
Explanation: Compensations, synergistic dominance, and inefficient movements are some results of an improperly-trained core stabilization system. This results in improper transfer of force resulting in imbalances and increasing risk of injury.

Question No: 74
People complaining of what type of pain likely have weak transversus abdominis, pelvic floor muscles, and deep erector spinae?
A. Low back pain
B. Knee pain
C. Aching necks resulting in chronic headache
D. Mid upper back tightness
Answer: A
Explanation: People complaining of low back pain likely have weak transversus abdominis, pelvic floor muscles, and deep erector spinae. These are essential muscles of the core stabilization system and if core strengthening exercises are performed while this system is still weak, there can be resulting compressive forces and increased pressure on discs of the lumbar spine.

Question No: 75
When the gluteus medius and adductor complex stabilize the hip during a squat, this is an example of what?
A. Dynamic joint stabilization