High-Intensity Training

CORRESPONDENCE EDUCATION PROGRAM #141

Check your receipt for course expiration date.

After that date no credit will be awarded for this program.

EXERCISE ETC. INC.

How to Complete this Program

Thank you for choosing an Exercise ETC correspondence program for your continuing education needs. To earn your CECs/CEUs you will need to read the enclosed book. After you have completed the book, take the test that is included with your program. Remember to choose the best or most correct answer.

Now Available: Instant Grading!

When you are ready to submit your test please go to our website at: ***www.exerciseetc.com*** On the left side of your screen you will see a blue, vertical bar with a list of options; click on **"Administration"** and then click **"Correspondence Course Answer Sheets."** Choose the title of the test that you are completing and then simply follow all instructions to submit your test. **Remember to complete all fields prior to submitting your test**.

Once you submit your answers **your purchase will be verified** and your test will be corrected instantly; if you score at least 70% you will be able to print your CE certificate immediately. (If you have less than 70% correct, you will need to take test over again in order to qualify for the CECs/CEUs.) **If we are unable to verify your purchase you will receive a message requesting that you call our office for instructions**.

> **VERY IMPORTANT: Please make sure you have access to a working printer when you submit your test as your CE Certificate must be printed before you close out your testing session.**

Good luck! If you have any questions or comments, please feel free to call us any time at 1-800-244-1344 or e-mail us at: **info@exerciseetc.com**

High-Intensity Training
Course Objectives

After completing the High-Intensity Training course, the participant will:

High-Intensity Training Learning Objectives

1. Learn the history of strength training starting from the Greek Era to modern day use.
2. Understand the impact that the invention of barbells and nautilus equipment had on strength training and modern day strength and conditioning.
3. Understand the foundation of the HIT strength training method, the importance of the perfect repetition, and the concept of momentary muscular failure.
4. Learn how to execute the perfect rep through both the positive (concentric) phase, isometric phase, and negative (eccentric) phase.
5. Be able to discuss the common cheating methods employed during the barbell bench press and the injuries that may occur as a result.
6. Understand how using the HIT method during the prone hamstring curl will result in muscle balance and reduce many of the injuries that occur from the traditional method.
7. Learn how to determine full range of motion using light weights and how to progress the athlete to the correct weight for the HIT program.
8. Understand the impact of genetics on athletic performance, be able to distinguish between an endomorph, mesomorph, and ectomorph, and understand how the body types can be mixed within different athletic populations.
9. Be able to differentiate between fast twitch and slow twitch muscle fibers and understand their impact on muscular development.

10. Understand the concept of neuromuscular coordination and how HIT training can impact the protective reflex mechanisms within the muscle which are the Golgi tendon organ and the muscle spindle.
11. Learn how muscle fibers are recruited and how HIT training can increase recruitment of muscle fibers resulting in greater strength gains.
12. Understand the concept of muscle specificity, movement specificity, speed specificity, neurological specificity, and resistance specificity.
13. Be able to implement the triple progressive overload method by increasing weight, repetitions, and time under tension, and apply this to repetition ranges for specific goals.
14. Understand muscle tissue breakdown and recovery and how it is impacted by level of intensity, the number of sets, and the number of repetitions, and be able to estimate the appropriate rest time between training periods.
15. Learn the variables for advanced overload training, such as pre- and post-exhaustion, breakdowns, assisted positives, forced negatives, and isometric pauses.
16. Understand the concept of overtraining and be able to recognize the symptoms associated with it.
17. Understand how a periodization program can be applied to the HIT program and the importance of accurate record keeping.
18. Learn the parameters of the off-season, preseason, in-season, post-season, and off-season strength phase, as well as how to set up lifting schedules for each phase which will ensure adequate recovery and reduced risk of injury.
19. Understand the impact that nutrition and adequate sleep has on athletic performance and recovery, the correct amount of protein, fat, carbs, and water required, how to structure a daily meal plan, and the impact of sleep on growth hormone release.
20. Understand the limitations of the supplement industry and specifically understand the impact of using ephedrine, creatine phosphate, and androstenedione.
21. Learn how to structure a HIT workout, including manipulating the training variables, such as varied equipment modalities, advanced overload training, varied split routines for the upper and lower body, pre-exhaustion and post-exhaustion, and varied rep ranges and recovery times between sets.
22. Understand traditional programming flaws, including overuse of the rotator cuff, biceps, triceps, and pectorals.
23. Learn the guidelines for developing sport-specific programs based on whether the athlete is an aerobic, aerobic-anaerobic, anaerobic, or anaerobic ATP-CP athlete.
24. Understand how advanced overload techniques can be applied to HIT training, such as assisted positive repetitions, forced negative

resistance, breakdowns, multiple-set combinations, slow training, quarter and half repetitions, MMF isometric pauses, and manual resistance.

25. Understand the importance of spotting, how spotting can go wrong, and the components of the perfect spot.
26. Learn the recommendations for a proper warm-up, cool-down, and flexibility training, and how PNF stretching can be used as a valuable asset to increase an athlete's overall flexibility.
27. Understand the primary movers, types of movement, and proper technique for upper and lower body exercises.
28. Understand the impact that manual resistance can have on HIT and advanced overload techniques, and learn the guidelines necessary to perform it safely.
29. Learn body positioning and proper technique for applying manual resistance to a variety of upper and lower body exercises.

High-Intensity Training
Course Examination

For each of the following questions, circle the letter of the answer that best answers the question.

.

1. In what year did strength training become an official sport in the Olympic games?

   A. 1890
   B. 1912
   C. 1922
   D. 1928

2. Which of the following men is one of those responsible for the creation of Nautilus strength equipment?

   A. Arthur Jones.
   B. Bob Hoffman.
   C. Jack Lalanne.
   D. Dr. Thomas Delmore.

3. Which college football team was the first to incorporate High Intensity Training (HIT) into their strength training program, which lead them to a National Championship win 5 years later?

   A. Ohio State.
   B. Penn State.
   C. University of Florida.
   D. Texas A & M.

4. What is the foundation of HIT strength training?

   A. Maximal Load.
   B. Maximal Reps.
   C. Performing the perfect rep.
   D. Performing the rep as quickly as possible.

5. Learning how to perform the perfect repetition will result in all of the following except:

   A. Greater explosive power.
   B. Balanced strength.
   C. Decreased endurance.
   D. Decreased risk of injury.

6. How long should it take to reach the full range of motion during the concentric/positive phase of the perfect repetition?

   A. 1 second
   B. 2 to 3 seconds
   C. 3 to 4 seconds
   D. 4 to 5 seconds

7. How much stronger is the negative part of the repetition compared to the positive?

   A. 10 to 20%
   B. 20 to 30%
   C. 40 to 60 %
   D. 60 to 80%

8. Controlled breathing throughout the set is important for all of the following reasons except:

   A. Improved glycolysis.
   B. Decreasing intraocular pressure.
   C. Decreasing intracranial pressure.
   D. Increasing blood flow back to the heart.

9. When it comes to an individual rep, which of the following is the most important?

   A. The quantity of reps.
   B. The quality of each individual rep.
   C. The amount of weight lifted.
   D. The use of a spotter to get additional reps at the end of the set.

10. Which of the following is not a common cheating technique seen with the barbell bench press?

    A. Starting with the elbows fully extended.
    B. Allowing the barbell to drop to the chest rapidly.
    C. Bouncing the barbell off of the chest.
    D. Completing an isometric hold at the end of the concentric and eccentric phase.

11. While the bench press is one of the best exercises to develop the chest when done correctly, which muscles are placed under the most stress during this lift?

    A. Anterior deltoid and rotator cuff
    B. Anterior deltoid and upper traps
    C. Rotator cuff and mid-traps
    D. Upper and mid-traps

12. When performing the prone hamstring curl, which of the following is not part of the HIT protocol?

    A. The chest is on the machine, back is in neutral, and the rep is started slowly.
    B. During the rep, the weight is under constant control, and the positive phase takes about 3 seconds.
    C. At the end of the positive phase, there is a distinct isometric hold of 0.5 seconds along with a deep squeeze of the muscle.
    D. The hips rise and the lower back arches as the negative phase begins.

13. Ballistic leg curls can lead to all of the following except:

    A. Hamstring pulls.
    B. Hamstring strains.
    C. Balanced strength within the hamstring muscles.
    D. Lower back injury.

14. Which of the following is not a benefit of incorporating HIT training in young athletes?

    A. Increased speed
    B. Muscular Imbalances
    C. Increased power
    D. Increased endurance

15. All of the following are characteristics of a mesomorph except:

    A. Large bone diameter at the wrist and ankle.
    B. Low body weight.
    C. Moderate or higher body weight.
    D. High percentage of fast-twitch fibers.

16. Which of the following traits would not commonly be seen in a NFL lineman?

    A. Excellent muscular strength
    B. Hypertrophy
    C. Explosive power
    D. High endurance

17. If a person can do 6 reps without losing form, but then lose form on the 7^{th} rep, what is their estimated percentage of 1RM?

    A. 90%
    B. 85%
    C. 80%
    D. 75%

18. If a person has a significantly higher percentage of fast-twitch/type II muscle fibers, they will have a greater ability to develop which of the following?

    A. Strength and power
    B. Strength and endurance
    C. Endurance and stamina
    D. Power and stamina

19. Strength gains seen during the first few weeks of beginning training are due to what?

    A. Muscle hypertrophy
    B. Increased mitochondrial density
    C. Improved neuromuscular coordination
    D. Muscle hyperplasia

20. Which protective sensory receptor is located within the tendon of a muscle and senses the degree of tension being placed on the muscle?

    A. Muscle Spindle
    B. Alpha motor neuron
    C. Mitochondria
    D. Golgi tendon organ

21. Which of the following is not a characteristic of a slow-twitch/type I muscle fiber?

    A. Red color
    B. Smaller fiber size
    C. Recruited last
    D. Low potential for increasing size

22. Which of the following types of muscle fibers is considered an intermediate muscle fiber with the ability to generate strength and power as well as improve oxidative capacity?

    A. Type 1a
    B. Type 1b
    C. Type 2a
    D. Type 2b

23. Muscle specificity refers to which of the following:

    A. Mimicking sport related activities.
    B. Using the same muscle in the exercise that is used during the athletic skill.
    C. The ability of the muscle to remember the amount of neural recruitment required for a particular exercise.
    D. Combining supersets for one muscle or group of muscles.

24. How does speed specificity impact skill-specific neurological specificity?

    A. The motor neuron recruitment should be the same as that required by the sport.
    B. The resistance applied must match the resistance applied to the athlete during the sport.
    C. Slowing down the speed of the exercise will translate into greater speed during the sport.
    D. The speed of the movement during the exercise must match the speed used during the sport.

25. What is the most fundamental principal of strength training?

    A. Overload
    B. Specificity
    C. Endurance
    D. Muscular balance

26. What is the “specific adaptation to imposed demand (SAID)” principle?

    A. Muscle breakdown during a strength training session will lead to permanent scarring within the muscle.
    B. If a muscle is given adequate recovery time and proper nutrition, it will respond to muscle breakdown by becoming stronger and larger.
    C. The greatest increase in muscle mass occurs during the strength training session.
    D. The greatest increase in muscle mass will occur with the heaviest loads with the least time under tension.

27. The triple progressive overload includes all of the following except:

    A. Increasing the weight from the previous workout.
    B. Increasing the number of repetitions from the previous workout.
    C. Increasing the time under tension.
    D. Increasing the number of forced repetitions with assistance.

28. What is the recommended time under tension per repetition?

    A. 1 to 2 seconds
    B. 2 to 3 seconds
    C. 3 to 5 seconds
    D. 5 to 7 seconds

29. When time under tension for a particular repetition range has been achieved, and it is time to increase the weight, how much should the weight increase be?

    A. 5 to 10% of the weight lifted
    B. 10 to 15% of the weight lifted
    C. 15 to 20% of the weight lifted
    D. 20 to 25% of the weight lifted

30. If an athlete performs sets to momentary muscle failure (MMF), what will be the necessary rest time to allow the muscle tissue to completely recover?

    A. Less then 24 hours
    B. Minimum of 48 hours
    C. 72 hours
    D. 96 hours

31. What is the primary source of energy for short duration, high intensity anaerobic exercise?

    A. Glucose
    B. Glycogen
    C. ATP-CP
    D. Fatty acids

32. All of the following are included in advanced overload training (AOT) except:

    A. Pre- and post-exhaustion.
    B. Breakdowns.
    C. Resisted positives.
    D. Forced negatives.

33. What is the repetition range that an athlete should use if they are training for strength?

    A. 1 to 3 reps
    B. 6 to 12 reps
    C. 14 to 20 reps
    D. 20 to 40 reps

34. What should be the recovery time between sets when performing HIT training?

    A. 30 seconds
    B. 90 seconds
    C. 2 minutes
    D. 5 minutes

35. All of the following are symptoms of overtraining except:

    A. Elevation of resting heart rate or blood pressure.
    B. Decreased appetite and weight loss.
    C. Decreased overall energy.
    D. Increased strength and athletic performance.

36. All of the following are conditioning components of a periodization plan except:

    A. Myofascial release.
    B. Aerobic conditioning.
    C. Anaerobic conditioning.
    D. Sport-specific skills

37. Which of the following is not a reason for keeping accurate records to ensure success of the HIT program and periodization plan?

    A. To keep track of strength lost during the postseason.
    B. To keep track of progress from one workout to the next.
    C. To ensure that the athlete is still motivated and adhering to the plan.
    D. To keep track of the strength increase during the strength phase

38. What percentage of strength due athletes generally lose during the off-season recovery phase?

    A. No strength is lost.
    B. 5 to 10%
    C. 12 to 20%
    D. 20 to 28%

39. When starting the first week of strength training during the off-season strength phase, how many repetitions should the athlete start with in general?

    A. 4 to 6 perfect reps
    B. 6 to 8 perfect reps
    C. 8 to 10 perfect reps
    D. 12 to 15 perfect reps

40. During which week of the off-season strength phase should the athlete be ready to achieve MMF within the repetition range for their strength goals?

    A. Week 1
    B. Week 2
    C. Week 3
    D. Week 4

41. What is the average strength gain during the first six to eight weeks of the off-season strength phase?

    A. 2 to 3 percent per week
    B. 5 to 6 percent per week
    C. 8 to 10 percent per week
    D. 12 to 15 percent per week

42. During the first few weeks of the off-season strength phase when using the three-day split, how many total sets should the athlete be completing?

    A. 5 to 10 sets
    B. 12 to 16 sets
    C. 16 to 20 sets
    D. 20 to 25 sets

43. All of the following are true regarding the preseason strength phase except:

    A. It should last 8 to 12 weeks.
    B. The primary focus is maintaining the strength gains from the off-season strength phase.
    C. Try to increase last year's best effort.
    D. Athletes must strength train at least 25 to 30 minutes four times a week.

44. What is the emphasis during the end of season and postseason playoffs phase?

    A. Increasing peak strength to the highest level possible
    B. Switching from strength training to sport-specific drills
    C. Switching from strength training to explosive power drills
    D. Maintaining peak strength while maximizing recovery

45. Which of the following does not occur in the body following an HIT strength training session?

    A. Depleted levels of glycogen in the muscles and liver
    B. Decreased oxygen transport
    C. A sense of overall fatigue
    D. Increased epinephrine levels

46. Which of the following is incorrect regarding the four to six balanced meals the athlete should have per day?

    A. Each meal should be approximately 500 to 800 calories.
    B. Each meal should be 55 percent complex carbs.
    C. Each meal should be 10 to 15 percent polyunsaturated fat.
    D. Each meal should be 15 to 20 percent complete protein.

47. Skeletal muscle fibers are made up of what percentage of water?

    A. 20 to 35%
    B. 35 to 55%
    C. 55 to 65%
    D. 75 to 80%

48. Overall performance can drop by as much as what percentage by not being properly hydrated?

    A. 20%
    B. 30%
    C. 40%
    D. 50%

49. Which of the following organs does not make creatine?

    A. Heart
    B. Liver
    C. Pancreas
    D. Kidney

50. The HIT-based programs are designed to do all of the following except:

    A. Build maximum athletic strength.
    B. Decrease injuries.
    C. Build competitive bodybuilders.
    D. Increase power, speed, and agility.

51. How many exercises does a HIT workout program involve in both upper and lower body routines?

    A. 4 to 6
    B. 6 to 8
    C. 8 to 10
    D. 12 to 16

52. All of the following are goals of developing an upper body workout except:

    A. To produce isolated muscle development.
    B. Focus on areas that can lead to increased injury risk.
    C. Incorporate exercises for the neck and rotator cuff.
    D. Be conscious of scapular movement throughout upper body training.

53. Where in the workout should the four-way neck exercises be incorporated for all athletes, especially those involved in contact sports?

    A. At the beginning of the workout
    B. In the middle of the workout
    C. At the end of the workout
    D. They do not need to be included

54. Which of the following is not a possible scapular movement?

    A. Adduction
    B. Abduction
    C. Elevation
    D. Eversion

55. Multi-joint pull exercise incorporate all of the following muscles except the:

    A. Latissimus dorsi.
    B. Posterior deltoid.
    C. Rhomboids.
    D. Triceps.

56. What percentage of MMF can an athlete achieve using single-joint exercises for the larger muscles of the body?

    A. 25%
    B. 50%
    C. 75%
    D. 100%

57. Which of the following is not an opposing muscle set?

    A. Pectorals and Latissimus dorsi
    B. Anterior Deltoids and Medial Deltoids
    C. Medial Deltoids and Traps
    D. Triceps and Biceps

58. What is a pre-exhaustion scenario?

    A. A multi-joint exercise is done before a single-joint exercise for one muscle group.
    B. Two multi-joint exercises are done for one muscle group back to back.
    C. A single-joint isolation exercise is done before the multi-joint exercise for one muscle group.
    D. Two single-joint exercises are done back to back for one muscle group.

59. All of the following push and pull muscle groups are involved in the leg press except:

    A. Quadriceps.
    B. Iliopsoas.
    C. Hamstrings.
    D. Glutes.

60. Which of the following muscles is not involved in the single-joint leg extension?

    A. Biceps Femoris
    B. Rectus Femoris
    C. Vastus Lateralis
    D. Vastus Medialis

61. All of the following are benefits of using manual resistance instead of machines except:

    A. They allow for a full range of motion.
    B. They shorten the range of motion thus allowing a concentrated strength response at one particular muscle length.
    C. They allow for unlimited variations in angles of force.
    D. They allow for the ability to implement with large groups.

62. How many sets should a lower body workout have?

    A. 4 to 6 sets
    B. 6 to 8 sets
    C. 8 to 12 sets
    D. 12 to 14 sets

63. Which of the following is not a traditional programming flaw?

    A. Too much emphasis on the lower traps
    B. Overuse of the rotator cuff
    C. Overuse of the biceps and triceps
    D. Overuse of the pectorals

64. Which of the following is not one of the rotator cuff muscles?

    A. Supraspinatus
    B. Infraspinatus
    C. Teres Major
    D. Subscapularis

65. What is the body's primary energy source for all bodily functions?

    A. Fatty Acids
    B. Glucose
    C. Glycogen
    D. Adenosine triphosphate (ATP)

66. The ATP-Creatine phosphate energy system is used primarily for which of the following activities?

    A. Running a marathon
    B. Taking a group exercise class
    C. When performing an all-out effort or quick bursts of energy
    D. When performing 12 reps to failure on a bench press.

67. All of the following are general guidelines for energy system utilization for an aerobic endurance athlete, such as someone training for a marathon or triathlon, except:

    A. The activity duration should be 30 minutes or more.
    B. Recovery intervals should be 5 min or more.
    C. The repetition range should be 15-20.
    D. The time under tension should be 90-120 seconds.

68. Which of the following is not an aerobic endurance sport?

    A. Running a marathon
    B. Triathlons
    C. Basketball
    D. Cycling

69. What is the recommended repetition range for athlete participating in aerobic endurance sports?

    A. 5 to 10 reps
    B. 10 to 15 reps
    C. 15 to 20 reps
    D. 20 to 25 reps

70. All of the following regarding an aerobic-anaerobic sports athlete are true except:

A. They need a low level of high-energy output.
B. They typically work at 80 to 90% of their maximum heart rate for 5 to 15 minutes without recovery.
C. They perform their sport at the edge of the anaerobic threshold.
D. The primary energy system they use is a combination of oxidative and glycolytic.

71. Which of the following is not a guideline for training the aerobic-anaerobic sports athlete?

A. Aim for a time under tension of 40 to 60 seconds.
B. Increase the weight by 3 to 5 percent when 15 repetitions can be achieved or the time under tension exceeds 100 seconds.
C. Only one set of each exercise should be done.
D. Give 60 to 75 second of recovery in between sets.

72. How much time do anaerobic sports require the athlete to maintain a heart rate of 90 to 100 percent of heart rate max?

A. 30 seconds to 3 minutes
B. 2 minutes to 3 minutes
C. 3 minutes to 4 minutes
D. 4 minutes to 5 minutes

73. Which of the following is not a guideline for training and anaerobic sports athlete?

A. The time under tension should be between 48 and 72 seconds.
B. Increase the weight by 15% when 12 reps are reached.
C. Each exercise should have 1 to 3 sets.
D. Give 75 to 90 seconds rest between sets.

74. Which of the following is not an example of an anaerobic ATP-CP sport?

A. Power lifting
B. Shot-putting
C. High jumping
D. Football wide receiver

75. All of the following are examples of the safest and most effective means of advanced overload training except:

A. Resisted positive repetitions.
B. Forced negative resistance.
C. Breakdowns.
D. Quarter and half reps.

76. What is assisted positive repetitions most useful for?

A. Increasing strength during the concentric phase.
B. To accomplish negative (eccentric) failure.
C. To allow the athlete to complete more repetitions to improve motivation.
D. To allow the athlete to lift more weight then they are capable of on their own.

77. What is the goal of forced negative resistance?

A. To achieve positive muscle failure
B. To achieve negative muscle failure
C. To achieve isometric muscle failure
D. To achieve both positive and negative muscle failure simultaneously.

78. What is the approximate reduction of weight during a breakdown set if the rest interval is between 0 to 10 seconds?

A. 10 to 15%
B. 15 to 20%
C. 20 to 25%
D. 25 to 30%

79. When performing the 10-8-6 multiple set format, what is the rest interval between sets?

A. 30-60 seconds
B. 1 to 2 minutes
C. 2 to 3 minutes
D. 3 to 5 minutes

80. What has slow training been shown to be very effective at?

A. Bodybuilding
B. Endurance sports
C. Olympic lifts
D. Power lifting

81. When are quarter and half repetitions performed during the set?

A. At the beginning
B. During the 2nd repetition
C. From the 5th repetition on
D. Toward the end of the set

82. During manual resistance, when the athlete has completed the positive phase and isometric hold, the resistance by the spotter must increase by what percentage?

A. The resistance should remain the same.
B. 10 to 15%
C. 15 to 30%
D. 30 to 40%

83. The success of the HIT strength program relies on all of the following except:

A. The athlete's ability to push himself or herself to work very hard during every set and workout.
B. The spotter's ability and knowledge to provide correct guidance.
C. Advanced techniques.
D. The athlete's ability to perform 1RM.

84. Which of the following is not descriptive of the perfect spotter?

A. The spotter must ensure that the correct weight is being used.
B. The spotter must position himself or herself to be able to take the weight and remove it from the athlete if needed.
C. The spotter must take the weight away completely when the athlete reaches MMF on the positive phase.
D. The spotter should avoid touching the bar or weight until needed.

85. Which of the following types of resistance only offers resistance during the positive phase of the exercise.

A. Isometric
B. Isokinetic
C. Isotonic
D. Isolateral

86. Which of the following is not a prime mover during the dumbbell bench press

A. Pectoralis Major
B. Anterior Deltoid
C. Biceps
D. Triceps

87. What type of movement is the dumbbell decline press?

A. Compound, multijoint, linear
B. Single joint, isolation, rotary
C. Compound, multijoint, rotary
D. Single joint, compound, rotary

88. Which of the following are the primary movers during the cable frontal raise?

A. Anterior deltoid and pectoralis major
B. Medial deltoid and pectoralis major
C. Anterior deltoid and trapezius
D. Trapezius and pectoralis major

89. Which of the following is not part of the proper technique for a dumbbell frontal raise?

A. Start with the bench incline of 135 degrees.
B. Keep feet flat on the floor
C. Start with the arms hanging straight down and behind the bench.
D. Raise the dumbbells until perpendicular to the bench and pause for an isometric hold.

90. What muscle is target during the machine lateral raise?

A. Anterior deltoid
B. Posterior deltoid
C. Medial deltoid
D. Intermediate deltoid

91. Which head of the triceps is not worked during the cable triceps extension?

A. Long head of the triceps
B. Short head of the triceps
C. Medial head of the triceps
D. Lateral head of the triceps

92. What type of joint movement is the horizontal pull-up?

A. Compound, multijoint, rotary
B. Compound, multijoint, linear
C. Isolation, multijoint, linear
D. Isolation, single joint, linear

93. Which of the following muscles is not involved in the cable decline seated low row?

A. Latissimus dorsi
B. Posterior deltoids
C. Rhomboids
D. Lower trapezius

94. All of the following are involved in the proper technique of the body weight pull-up except:

A. Grasp the bar with palms perpendicular to the floor.
B. Pull the body up until the shoulders reach the height of the bar and then pause for an isometric hold.
C. Lower slowly back to the start position removing the tension on the muscle.
D. Continue with a smooth lift without any bouncing at the bottom or swinging the body.

95. What type of joint movement is the bar wrist flexion exercise?

A. Compound, multijoint rotary
B. Isolation, single joint, linear
C. Single joint angular
D. Compound, single joint, rotary

96. What muscle is targeted during machine neck flexion?

A. Sternocleidomastoid
B. Semispinalis
C. Upper trapezius
D. Scalenus anticus

97. All of the following are proper technique for the machine seated leg press except:

A. Start with feet flat on the platform and shoulder-width apart.
B. At the starting point, the hips and knees should be bent approximately 135 degrees.
C. Press the body away from the platform primarily using the heels of the feet, until the legs are almost completely extended.
D. Slowly lower back to the platform never allowing the weight stack does not touch during the transition to the next rep.

98. Which of the following muscles is not a primary mover during a dumbbell lunge?

A. Gluteus maximus
B. Gluteus minimus
C. Quadriceps
D. Iliopsoas

99. Which of the following muscles is a prime mover during hip abduction?

A. Gluteus medius
B. Gluteus maximus
C. Quadratus lumborum
D. Adductor longus

100. Which of the following muscles is not a prime mover during the machine leg curl?

A. Biceps femoris
B. Rectus femoris
C. Semitendinosus
D. Semimembranosus

