Certified Personal Trainer

FINAL EXAM Master Copy

Correct Answers are at the bottom.

1. Systolic blood pressure below \_\_\_\_\_ is considered normal.
   1. 100
   2. 120
   3. 140
   4. 160
2. Diastolic blood pressure below \_\_\_\_\_ is considered normal.
   1. 60
   2. 80
   3. 100
   4. 110
3. The age predicted max heart rate of a 20 year old is what?
   1. 180
   2. 200
   3. 220
   4. 240
4. Exhaling against a closed epiglottis to increase trunk and core stability is what?
   1. Power lifting
   2. Valsalva Maneuver
   3. Hypertension
   4. DOMS
5. It is appropriate to check an individual’s blood pressure on their wrist with your thumb.
   1. True
   2. False
6. It is appropriate to check an individual’s heart rate on their wrist with your thumb.
   1. True
   2. False
7. All are good forms of low impact cardio except \_\_\_\_\_\_\_.
   1. Treadmill
   2. Upright bike
   3. Swimming
   4. Recumbent bike
8. To increase muscular strength \_\_\_\_\_ rep ranges should be used.
   1. 1-6
   2. 6-10
   3. 10-15
   4. 15+
9. \_\_\_\_\_\_\_\_\_\_ is the term for increased muscular size.
   1. Hyperplasia
   2. Hypertrophy
   3. Atrophy
   4. Dystrophy
10. \_\_\_\_\_\_\_\_\_\_ is a decrease in muscle size.
    1. Hyperplasia
    2. Hypertrophy
    3. Atrophy
    4. Isometric
11. Cardio refers to what muscle?
    1. Lungs
    2. Stomach
    3. Intestines
    4. Heart
12. Cardiopulmonary refers to \_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.
    1. Heart / Lungs
    2. Heart / Veins
    3. Heart / Arteries
    4. Heart / Capillaries
13. Type IIb fibers are \_\_\_\_\_\_\_\_\_.
    1. Fast twitch
    2. Slow twitch
    3. Intermediate twitch
    4. Small
14. 18.5-24.9 BMI is \_\_\_\_\_\_\_\_.
    1. Overweight
    2. Normal
    3. Obese
    4. Underweight
15. 30+ BMI is \_\_\_\_\_\_\_\_.
    1. Overweight
    2. Normal
    3. Obese
    4. Underweight
16. What muscle group is the antagonist of the triceps?
    1. Lats
    2. Biceps
    3. Quads
    4. Hamstrings
17. Powerlifters try to increase \_\_\_\_\_\_\_\_.
    1. Strength
    2. Power
    3. Size
    4. Endurance
18. How many calories are in 1 lbs of fat tissue?
    1. 2000
    2. 2500
    3. 3000
    4. 3500
19. Healthy weight loss is losing \_\_\_\_\_ pounds per week.
    1. 2
    2. 3
    3. 4
    4. 5
20. All of the following are muscles in the lower body except?
    1. Quadriceps
    2. Hamstrings
    3. Calves
    4. Latisimus dorsi
21. The optimal time to stretch to increase flexibility is \_\_\_\_\_\_\_\_\_.
    1. In the morning
    2. Before working out
    3. After working
    4. At night
22. Lats, rhomboids, and biceps are used for what movements?
    1. Pushing
    2. Lifting
    3. Pulling
    4. Jumping
23. The quadriceps are composed of how many muscle groups?
    1. 3
    2. 4
    3. 5
    4. 6
24. 25-29.9 BMI is \_\_\_\_\_\_\_\_.
    1. Overweight
    2. Normal
    3. Obese
    4. Super obese
25. Decrease in muscle size is \_\_\_\_\_\_\_\_\_\_.
    1. Hypertrophy
    2. Hyperplasia
    3. Atrophy
    4. Dystrophy
26. Which of the following is anaerobic in nature?
    1. Sprinting
    2. Cycling
    3. Cross country
    4. Triathlons
27. Healthy weight loss involves losing \_\_\_\_\_ lbs per week.
    1. 1-2
    2. 3-4
    3. 4-5
    4. As much as possible
28. \_\_\_\_\_\_\_\_\_\_\_ is “towards” the midline of the body.
    1. Adduction
    2. Abduction
    3. Rotation
    4. Flexion
29. \_\_\_\_\_\_\_\_\_\_ is “away” from the midline of the body.
    1. Adduction
    2. Abduction
    3. Rotation
    4. Flexion
30. \_\_\_\_\_\_\_\_\_\_ refers to the front of the body.
    1. Anterior
    2. Posterior
    3. Superior
    4. Inferior
31. Activity lasting > 2 min uses primarily what energy system?
    1. Glycolysis
    2. Krebs cycle
    3. Cori cycle
    4. ATP-CrP
32. Activity lasting < 6 sec uses primarily what energy system?
    1. Glycolysis
    2. Krebs cycle
    3. ATP-CrP
    4. Cori cycle
33. \_\_\_\_\_\_\_\_\_ is where DNA is located within a cell.
    1. Mitochondria
    2. Sarcoplasmic reticulum
    3. Nucleus
    4. Cell membrane
34. The following tissue is the most dense?
    1. Fat
    2. Muscle
    3. Brain
    4. Nerves
35. \_\_\_\_\_\_\_\_\_\_ occurs when cells become resistant to the effect of insulin.
    1. Type I diabetes
    2. Type II diabetes
    3. Type III diabetes
    4. Gestational diabetes
36. Powerlifters compete in all of the following except?
    1. Bench press
    2. Squats
    3. Power cleans
    4. Deadlifts
37. Women have more testosterone compared to men.
    1. True
    2. False
38. \_\_\_\_\_\_\_\_\_\_\_ forms glycogen molecules.
    1. ATP
    2. Glucose
    3. Lactate
    4. Protein
39. The acronym for Adenosine Triphosphate is \_\_\_\_\_\_\_\_\_.
    1. ADP
    2. ATP
    3. AMP
    4. CrP
40. The following is an example of a long bone?
    1. Patella
    2. Acromion
    3. Femur
    4. Meta tarsals
41. \_\_\_\_\_\_\_\_ is the prime mover for knee flexion.
    1. Hamstrings
    2. Quadriceps
    3. Latisimus dorsi
    4. Biceps
42. \_\_\_\_\_\_\_\_ is the prime mover for elbow flexion.
    1. Biceps
    2. Triceps
    3. Hamstrings
    4. Glutes
43. \_\_\_\_\_\_\_\_ is the prime mover for knee extension.
    1. Hamstrings
    2. Biceps
    3. Trapezius
    4. Quadriceps
44. The follow muscle is involved in plantar flexion?
    1. Quadriceps
    2. Soleus
    3. Tibialis anterior
    4. Biceps
45. Fat soluble vitamins can be toxic in high amounts.
    1. True
    2. False
46. What is considered plyometric activity?
    1. Box jumps
    2. Running
    3. Swimming
    4. Cycling
47. What involves isometric contractions?
    1. Squat jumps
    2. Swimming
    3. Running
    4. Planks
48. What is not a common supplement?
    1. Whey
    2. Omega-3
    3. Multivitamins
    4. Lactic acid
49. What has the lowest protein content?
    1. Eggs
    2. Beef
    3. Beans
    4. Whole grain
50. The following is not an endurance event?
    1. 40 yard dash
    2. 3K
    3. ½ marathon
    4. Marathon
51. Fast twitch fibers are used more in the 12-16 mile range of a marathon than slow twitch fibers.
    1. True
    2. False
52. Biceps are skeletal muscles.
    1. True
    2. False
53. GI tract is a smooth muscle.
    1. True
    2. False
54. Abs are smooth muscles.
    1. True
    2. False
55. The heart is composed of smooth muscles.
    1. True
    2. False
56. \_\_\_\_\_\_\_\_ refers to the lungs.
    1. Cardio
    2. Pulmonary
    3. Alveoli
    4. RBC
57. \_\_\_\_\_\_\_\_ is judged on full ROM lifting technique.
    1. Swimming
    2. Crossfit
    3. Powerlifting
    4. Track and field
58. Max heart rate is calculated from \_\_\_\_\_\_\_\_\_.
    1. Resting heart rate
    2. Age
    3. Mother’s age
    4. Weight
59. Stretching improves muscles’ \_\_\_\_\_\_\_\_\_\_.
    1. Strength
    2. Flexibility
    3. Power
    4. Size
60. Stretching that involves a “bouncing” movement is known as \_\_\_\_\_\_\_\_\_\_ stretching.
    1. Static
    2. Dynamic
    3. Ballistic
    4. Isometric
61. Doing cardio too fast can cause \_\_\_\_\_\_\_\_.
    1. Protein loss
62. \_\_\_\_\_\_\_\_ forms glycogen molecules.
    1. glucose
63. DNA is located in the \_\_\_\_\_\_\_ of the cell.
    1. nucleus
64. Training at higher altitude is more difficult because?
    1. Less O2 molecules / volume of air
65. 56 Torso rotation occurs in the \_\_\_\_\_\_\_
    1. Transverse plane
66. 57 Lateral shoulder raises occur in the \_\_\_\_\_\_\_\_\_.
    1. Frontal plane
67. 58 Seated biceps curls occur in the \_\_\_\_\_\_\_\_\_.
    1. Sagittal plane
68. 59 Activity lasting < 4 secs uses primarily what energy system?
    1. ATP-CrP
69. 60 Activity lasting 90-120 secs uses primarily what energy system?
    1. glycolysis
70. 61 Activity lasting > 2 mins uses primarily what energy system?
    1. Krebs cycle
71. 63 If trapped in a below zero degree environment, the best way to stay warm is?
    1. Move around and perform physical activity
72. 67 The acronym for Adenosine Triphosphate is \_\_\_\_\_\_?
    1. ATP
73. 68 Powerlifters compete in all of the following lifts except?
    1. Power Cleans
74. 69 Women naturally have more testosterone compared to men.
    1. false
75. 70 Which of the following make up the largest percentage of body weight in a normal weight American?
    1. water
76. 71 The following is an example of a long bone.
    1. femur
77. 72 Obesity increases risk for \_\_\_\_\_\_\_\_\_.
    1. Cardiovascular disease
78. 73 \_\_\_\_\_\_\_\_\_\_\_ occurs when cells become resistant to the effect of insulin.
    1. Type II diabetes
79. 74 The following tissue is the most dense?
    1. muscle
80. 75 By pulling your foot towards your glutes, \_\_\_\_\_\_\_\_\_\_\_ is being stretched?
    1. quadriceps
81. 76 Stretching that involves a "boucing" movement is known as \_\_\_\_\_\_\_\_ stretching.
    1. ballistic
82. 77 Static stretching involves the following?
    1. Pause and hold
83. 78 Stretching improves muscle \_\_\_\_\_\_\_\_\_.
    1. flexibility
84. 79 Max heart rate is calculated from \_\_\_\_\_\_\_\_\_\_.
    1. 220 - age
85. 80 \_\_\_\_\_\_\_\_\_\_\_ is judged on full ROM lifting techniqe.
    1. Power lifting
86. 81 \_\_\_\_\_\_\_\_\_ refers to the lungs.
    1. pulmonary
87. 82 The heart is composed of smooth muscles.
    1. false
88. 83 Abs are smooth muscles.
    1. false
89. 84 GI tract is smooth muscles.
    1. true
90. 85 Biceps are skeletal muscles.
    1. true
91. 86 \_\_\_\_\_\_\_\_\_\_ is the most important for running marathons.
    1. Muscular and cardiovascular endurance
92. 87 \_\_\_\_\_ is the most imporant factor in determining how fast you can finish a marathon.
    1. VO2max
93. 88 Fast twitch muscles are used more in the 12-16 mile range of a marathon than slow twitch fibers.
    1. false
94. 89 \_\_\_\_\_\_\_\_\_\_\_ is an example of an endurance event.
    1. 10K
95. Running for 1 hour is an example of \_\_\_\_\_\_\_\_.
    1. Aerobic and endurance
96. The following is not an endurance event?
    1. 40 yd dash
97. What has the lowest protein content?
    1. bread
98. What is not a common supplement?
    1. Lactic acid
99. What is considered a plyometric activit?
    1. Box jumps
100. What involves isometric contractions?
     1. planks
101. Fat soluble vitamins can be toxic in high amounts.
     1. true
102. The following muscles are involved in plantar flexion.
     1. Gastrocnemius / soleus
103. \_\_\_\_\_\_\_\_\_ is the prime mover for knee extension.
     1. quadriceps
104. \_\_\_\_\_\_\_\_\_ is the prime mover for elbow flexion
     1. biceps
105. \_\_\_\_\_\_\_\_\_ is the prime mover for knee flexion
     1. Hamstrings

Correct Answers:

1. B
2. B
3. B
4. B
5. B
6. B
7. A
8. A
9. B
10. C
11. D
12. A
13. A
14. A
15. C
16. B
17. A
18. D
19. A
20. D
21. C
22. C
23. B
24. A
25. C
26. A
27. A
28. A
29. B
30. A
31. B
32. C
33. C
34. B
35. B
36. C
37. B
38. B
39. B
40. C
41. A
42. A
43. D
44. B
45. A
46. A
47. D
48. D
49. D
50. A
51. B
52. A
53. A
54. B
55. B
56. B
57. C
58. B
59. B
60. C