Multiple Choice Questions

1. Dynamic flexibility does NOT affect your ability to
   a. swing a golf club
   b. perform a split
   c. pitch a softball
   d. swim the crawl stroke

2. Static flexibility does NOT depend on
   a. tightness of the muscles
   b. tightness of the ligaments
   c. structure of a joint
   d. muscular strength

3. Flexibility is NOT determined by
   a. Mitochondria
   b. Heredity
   c. joint structure
   d. muscle elasticity

4. Joint capsules are
   a. yellow fibers that make connective tissue flexible
   b. sense organs in muscles that initiate nerve signals
   c. semielastic structures that surround major joints
   d. white fibers that provide support in connective tissue

5. The yellow fibers that make connective tissue flexible are
   a. Collagen
   b. elastin
   c. Titin
   d. stretch receptors

6. Two principal types of connective tissue in a muscle are
   a. collagen and myofibrils
   b. myofibrils and elastin
   c. myofibrils and disks
   d. elastin and collagen

7. Which of the following is a proprioceptor?
   a. Collagen
   b. Elastin
   c. Nerve
d. Titin

8. Good flexibility has NOT been shown to convey
   a. improved performance in sports
   b. prevention of injuries
   c. prevention of muscle soreness
   d. improved body composition

9. Which of the following is NOT a potential benefit of flexibility?
   a. relief of aches and pains
   b. maintenance of good posture
   c. increased relaxation
   d. improved energy production

10. The American College of Sports Medicine recommends performing stretching exercises at least __________ days per week.
    a. 2 or 3
    b. 3 or 4
    c. 4 or 5
    d. 5 or 6

11. Which of the following stretching programs conforms to ACSM recommendations?
    a. 2 days per week, 10 seconds per stretch, 2 repetitions of each stretch
    b. 2 days per week, 60 seconds per stretch, 3 repetitions of each stretch
    c. 3 days per week, 20 seconds per stretch, 4 repetitions of each stretch
    d. 5 days per week, 30 seconds per stretch, 1 repetition of each stretch

12. To improve flexibility, do __________ repetition(s) of each stretch.
    a. 1
    b. 2-4
    c. 6-6
    d. at least 10

13. Which of the following statements about an appropriate goal for flexibility is true?
    a. It is the same for all people.
    b. It depends on individual fitness goals and choice of sports and activities.
    c. The more flexibility, the better.
    d. For non-athletes, no flexibility is needed.

14. The stretching technique most commonly recommended by experts for general fitness is
    a. static stretching
    b. ballistic stretching
    c. proprioceptive neuromuscular facilitation
    d. passive stretching
15. Ballistic stretches are considered dangerous, because they
   a. may cause a muscle to relax
   b. may stimulate a muscular contraction during a stretch
   c. do not increase flexibility
   d. do not trigger action by stretch receptors

16. The stretching technique most commonly associated with injury is
   a. static stretching
   b. ballistic stretching
   c. proprioceptive neuromuscular facilitation
   d. active stretching

17. Contracting a muscle prior to stretching is best described as an example of
   a. active stretching
   b. passive stretching
   c. ballistic stretching
   d. proprioceptive neuromuscular facilitation

18. Which of the following is NOT one of the common stretching techniques?
   a. active stretching
   b. isotonic stretching
   c. static stretching
   d. proprioceptive neuromuscular facilitation

19. Which type of stretching usually requires a partner?
   a. Ballistic
   b. Active
   c. Passive
   d. Static

20. Dynamic stretching
   a. focuses on maximally relaxing the muscle spindles
   b. focuses on functionally based movements
   c. focuses on PNF movements
   d. is not safe in most situations

21. An essential component of safe passive stretching is
   a. rapid movement
   b. heavy resistance
   c. extreme flexibility
   d. good communication with partner
22. A disadvantage of active stretching is that it
   a. takes a long time to perform each stretch
   b. has a very high risk of injury
   c. may not produce a sufficient stretch
   d. requires a partner

23. Stretching exercises should be performed
   a. after a warm-up or workout
   b. immediately before all high-performance activities
   c. to the point of pain
   d. while holding one’s breath

24. Back pain is NOT likely to result from
   a. sudden injury
   b. increased flexibility
   c. weak muscles
   d. poor posture

25. Which of the following is NOT a function of the spine?
   a. structural support for the lower body
   b. attachment site for muscles, tendons, and ligaments
   c. protection of the spinal cord
   d. transmission of body weight to the lower body

26. The structures that absorb and disperse stress on the spine are
   a. nerve roots
   b. vertebral arches
   c. intervertebral disks
   d. spinal curves

27. From top to bottom, the five regions of the spine are
   a. cervical, thoracic, lumbar, sacrum, coccyx
   b. cervical, sacrum, thoracic, lumbar, coccyx
   c. thoracic, cervical, sacrum, lumbar, coccyx
   d. thoracic, cervical, lumbar, coccyx, sacrum

28. The most common site of back pain is the __________ area.
   a. Cervical
   b. Lumbar
   c. Thoracic
   d. Coccyx
29. Core muscles include those in the
   a. abdomen, pelvic floor, sides of the trunk, back, buttocks, hips, and pelvis
   b. abdomen, pelvic floor, sides of the trunk, back, buttocks, hips, and thighs
   c. abdomen, sides of the trunk, back, buttocks, hips, and thighs
   d. abdomen, back, buttocks, hips, and thighs

30. Which of the following statements about exercise for the prevention and management of low-back pain is FALSE?
   a. Exercises should be performed at least 3 days per week
   b. Exercises should be done early in the morning
   c. The exercise program should emphasize muscular endurance over muscular strength
   d. The exercise program may need to be continued for 3 months before results are seen.

31. The first step in developing a personal fitness plan is to
   a. select activities
   b. set target intensity of exercise
   c. set target time (duration) of exercise
   d. set goals

32. An example of a general long term fitness goal would be
   a. doing 15 push-ups
   b. lowering your BMI to 24
   c. lowering your risk for heart disease
   d. increasing the number of laps you can swim

33. An example of a specific short term fitness goal would be
   a. increasing strength
   b. jogging 2 miles in 19 minutes
   c. having more energy
   d. improving posture

34. Which of the following is true regarding selecting activities for a complete fitness program?
   a. Cardiorespiratory endurance activities are the most important
   b. Muscular strength activities are the most important
   c. Flexibility activities are the most important
   d. It is best to include exercises for each component

35. Cardiorespiratory endurance is developed by doing activities that
   a. move the body against resistance
   b. involve continuous rhythmic movements of large-muscle groups
   c. involve continuous rhythmic movements of small-muscle groups
d. stretch the major muscle groups

36. Healthy body composition is NOT obtained with the help of
   a. stretching the major muscle groups
   b. eating a sensible diet
   c. performing cardiorespiratory exercise
   d. performing strength training exercises

37. Which of the following is NOT something to consider when selecting an activity?
   a. past popularity of the activity
   b. fun and interest
   c. your current skill and fitness level
   d. time and convenience

38. The recommended total duration for cardiorespiratory endurance training is __________ minutes.
   a. 10–20
   b. 20–60
   c. 60–120
   d. 100–150

39. An appropriate frequency for a cardiorespiratory endurance program is ________ times per week.
   a. 1–2
   b. 2–3
   c. 3–5
   d. 5–7

40. A general strength training program includes
   a. 1 set of 3–6 repetitions of 6 exercises
   b. 1 set of 8–12 repetitions of 8–10 exercises
   c. 3 sets of 3–6 repetitions of 6 exercises
   d. 3 sets of 3–6 repetitions of 8–10 exercises

41. Stretching should be done
   a. to a point of slight muscular tension
   b. when muscles are cool
   c. with only 1 repetition
   d. for no more than 10 seconds per repetition

42. Mini goals help a physical fitness program by
   a. adding variety to a fitness program
b. keeping a program on track
c. identifying new exercises
d. providing help in the beginning

43. The final step in physical fitness program planning is
   a. making a commitment
   b. monitoring your pre-program activity habits
   c. establishing mini goals
   d. including physical activities

44. What is one benefit of starting an exercise program slowly?
   a. It allows your body to adjust to exercising
   b. It increases risk of injury and soreness
   c. It allows you to work quickly towards a goal
   d. It helps you keep track of your program

45. Varying your activities will NOT help with
   a. the development of balanced, total body fitness
   b. the reduction of injuries and overtraining
   c. increasing the enjoyment of exercising
   d. increasing your skill level

46. Varying your activities in order to develop balanced, total-body fitness is called
   a. interval training
   b. continuous training
   c. cross-training
   d. weight training

47. Participating in a step aerobics class on Monday, a spinning class on Wednesday, and lap swimming on Friday is an example of what training technique for endurance?
   a. interval training
   b. periodization
   c. cross-training
   d. cycle training

48. Cycling the duration and intensity of your workouts is referred to as
   a. cross-training
   b. periodization
   c. interval training
   d. weight training

49. Which of the following strategies will NOT help maintain an exercise program?
   a. adapt to changing circumstances
b. reward yourself

c. exercise to exhaustion

d. keep an exercise journal

50. Guidelines to keep in mind when working with children and their physical activities include
   a. stressing excellence in competitive sports
   b. increasing their skill complexity quickly
   c. providing opportunities to be active only on the weekends
   d. ensuring proper hydration and clothing

51. Exercise for children under 12 years of age should focus on
   a. competitive sports
   b. strength training
   c. stretching
   d. skill development

52. Exercise for women who are pregnant should include
   a. vigorous activities
   b. plenty of fluids to avoid heat stress
   c. weight-bearing activities
   d. extended exercise in the supine position

53. Which of the following is an appropriate exercise guideline for older adults?
   a. Skip warm-up and cool-down sessions
   b. Focus mainly on strength training
   c. Include resistance, endurance, and flexibility training
   d. Limit fluid intake to avoid frequent bathroom stops

54. Successful management of body composition requires
   a. a very low calorie diet
   b. an active lifestyle only
   c. a very low calorie diet and an active lifestyle
   d. long-term, consistent coordination of many aspects of a wellness program

55. Women have a higher proportion of essential fat than men primarily, because women
   a. have essential fat deposited in the breasts, uterus, and other sex specific sites
   b. have lower metabolic rates
   c. have less muscle tissue
   d. tend to expend less energy in physical activity

56. Essential fat is best defined as
   a. fat primarily within fat cells
b. fat found incorporated into muscle
c. fat incorporated into the organs and tissues
d. fat found primarily under the skin

57. The percentage of Americans who are classified as obese is approximately
   a. 5%
   b. 15%
   c. 30%
   d. 60%

58. One possible explanation for the increase in obesity among Americans over the past 40 years is
   a. fewer meals eaten outside the home
   b. less time spent in sedentary work
   c. lower consumption of fast food
   d. increased portion sizes

59. Obese people are more than three times as likely as non-obese people to develop
   a. Pneumonia
   b. Hypertension
   c. Diabetes
   d. Influenza

60. People are at greater risk for early onset heart disease if they tend to gain weight in the
   a. Thighs
   b. Hips
   c. Abdomen
   d. Buttocks

61. A woman may experience amenorrhea and loss of body mass if her percentage of body fat is less than
   a. 3–5%
   b. 8–12%
   c. 15–20%
   d. 20–25%

62. A man may experience muscle wasting and fatigue if his percentage of body fat is less than
   a. 3–5%
   b. 8–12%
   c. 15–20%
   d. 20–25%
63. Which technique for evaluating health risks associated with body weight is based on the concept that a person’s weight should be proportional to his or her height?
   a. underwater weighing
   b. body mass index
   c. skinfold measurement
   d. bioelectrical impedance analysis

64. According to standards issued by the National Institutes of Health (NIH) and the World Health Organization (WHO), a healthy BMI is between
   a. 12.5 and 17.5
   b. 15.5 and 20.5
   c. 18.5 and 24.9
   d. 22.5 and 27.5

65. A BMI value of 17.5 or less may be used as a diagnostic criterion for
   a. Obesity
   b. fat-weight
   c. pre-diabetes
   d. anorexia nervosa

66. A person with a body mass index of 26.5 is classified as
   a. Underweight
   b. normal weight
   c. overweight
   d. obese

67. A person with a body mass index of 31.2 is classified as
   a. Underweight
   b. normal weight
   c. overweight
   d. obese

68. There is an error range of ±__________ for skin-fold measurements.
   a. 2%
   b. 11%
   c. 4%
   d. 7%

69. Which of the following is NOT a recommendation for avoiding errors in bioelectrical impedance analysis?
   a. Use the same instruments to compare measures over time
   b. Avoid overhydration prior to the measurement
   c. Avoid underhydration prior to the measurement
   d. Avoid deep breathing during the measurement
70. A waist to hip ratio above 1.0 is
   a. associated with a significantly increased risk of disease
   b. acceptable for both men and women
   c. acceptable for men only
   d. acceptable for women only

**True/False Questions**

71. The flexibility of a joint is affected by its structure, the nature of the surrounding tissue, and muscle elasticity and length.
   a. True
   b. False

72. Increased flexibility has been shown to improve performance in some sports by allowing a person to exert force through a greater range of motion.
   a. True
   b. False

73. A stretch should be held in position for a minimum of 45 seconds.
   a. True
   b. False

74. It is beneficial to increase muscle temperature before stretching.
   a. True
   b. False

75. Stretches that involve bouncy movements are safest for an individual to improve her or his range of motion.
   a. True
   b. False

76. In active stretching, an outside force or resistance assists your muscles and joints in moving through a range of motion.
   a. True
   b. False

77. The thoracic vertebrae are found in the neck.
   a. True
   b. False

78. Intervertebral disks maintain the spaces between vertebrae.
   a. True
b. False

79. Exercise can help prevent and manage low-back pain.
   a. True
   b. False

80. Essential body fat is located just below the skin.
   a. True
   b. False

81. Men have a higher percentage of essential fat than women.
   a. True
   b. False

82. Most of the fat in the body is stored in fat cells called adipose tissue.
   a. True
   b. False

83. Body fat located under the skin is called subcutaneous fat.
   a. True
   b. False

84. Regular physical activity and exercise have no effect on many of the destructive effects of obesity.
   a. True
   b. False

85. Two people of the same body weight may have different values of percent body fat.
   a. True
   b. False

86. People who tend to gain weight in the hip area have a higher incidence of coronary heart disease than those people who gain weight in the abdominal area.
   a. True
   b. False

87. Body mass index is a measure of a person’s percentage of body fat.
   a. True
   b. False

88. A body mass index of 28.5 is classified as normal weight.
   a. True
   b. False

89. Muscle mass has a higher density than fat mass.
a. True
b. False

90. The Bod Pod estimates percent body fat through water displacement.
   a. True
   b. False

91. Bioelectrical impedance analysis estimates percent of body fat by sending a small electrical current through the body.
   a. True
   b. False

92. A total waist measurement over 37.5 inches is associated with an increased risk of disease for men.
   a. True
   b. False

93. Increasing VO2max by 10% is an example of a general fitness goal.
   a. True
   b. False

94. Physical fitness assessment tests can help you decide which types of exercise to emphasize in an exercise program.
   a. True
   b. False

95. Current fitness level does not affect the selection of appropriate exercise activities.
   a. True
   b. False

96. Health experts have found that simple motivators such as using a pedometer, walking a dog, or training for a “fun run” helped people stay with their walking programs.
   a. True
   b. False

97. Stability balls add variety and challenge to a workout and can help you target certain muscle groups more effectively.
   a. True
   b. False

98. Varying the activities in an exercise program will decrease your chances of staying with the program.
   a. True
   b. False

99. A person should expect some lapses with her or his exercise program.
a. True
b. False

100. A goal of 60 minutes of moderate activity per day is appropriate for children and teens.
    a. True
    b. False

Extra Credit
101. List and describe three techniques for estimating percent body fat. (3 pts.)

102. Define and explain the differences among static stretching, ballistic stretching, dynamic stretching, proprioceptive neuromuscular facilitation, passive stretching, and active stretching. (6 pts)

Exam 2 Redacted 3.17.15