***Get Fit, Stay Well,***

**Understanding Fitness Principles**

2.1 Multiple-Choice Questions

1) Physical fitness is the ability to

A) perform moderate to vigorous physical activity without undue fatigue.

B) perform motor tasks accurately.

C) maintain equilibrium while moving.

D) perform more successfully in agility sports.

Answer: A

2) Exercise is a subset of physical activity that is

A) performed only by trained athletes.

B) unstructured.

C) done specifically to achieve or maintain fitness.

D) unplanned.

Answer: C

3) Stationary cycling at a moderate level would be equivalent to approximately \_\_\_\_\_\_\_\_ METS.

A) 1

B) 4

C) 7

D) 10

Answer: B

4) The five health-related components of physical fitness are

A) cardiorespiratory endurance, muscular strength, agility, balance, and flexibility.

B) muscular endurance, muscular strength, flexibility, coordination, and body composition.

C) cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition.

D) cardiorespiratory endurance, muscular strength, muscular endurance, agility, and flexibility.

Answer: C

5) Muscular strength is defined as the ability of your muscles to

A) exert force.

B) contract repeatedly over time.

C) change body position rapidly.

D) use oxygen to sustain exercise.

Answer: A

6) The ability of your muscles to contract repeatedly over time is known as

A) muscular strength.

B) muscular endurance.

C) power.

D) reaction time.

Answer: B

7) Which of the following is a benefit of maintaining a good level of flexibility?

A) decreased level of body fat

B) increased muscular strength

C) prevention of low back pain

D) decreased risk of diabetes

Answer: C

8) Lean body tissue consists of

A) fat, blood, and lymph nodes.

B) muscle, bone, and fat.

C) skin, fat, and fluids.

D) muscle, bone, and fluids.

Answer: D

9) The ability to perform work or contract muscles with high force quickly defines

A) endurance.

B) speed.

C) power.

D) strength.

Answer: C

10) The ability to change body position with speed and accuracy is

A) agility.

B) speed.

C) power.

D) strength.

Answer: A

11) The ability to perform a movement in a short period of time is

A) agility.

B) speed.

C) power.

D) strength.

Answer: B

12) The maintenance of equilibrium is

A) endurance.

B) balance.

C) power.

D) strength.

Answer: B

13) The time between a stimulus and response is

A) agility.

B) speed.

C) power.

D) reaction time.

Answer: D

14) Which of the following is considered a skill-related component of physical fitness?

A) power

B) flexibility

C) body composition

D) muscular endurance

Answer: A

15) The overload principle states that to see improvements in physical fitness, you must

A) train every day.

B) train at a level that is greater than what your body is accustomed to.

C) increase your training level on a weekly basis.

D) train with a consistent routine that you are used to.

Answer: B

16) Bettina has been exercising for a few weeks and is becoming adjusted to her current intensity level. To improve further, she must

A) increase her overload training.

B) begin to train using a different mode of activity.

C) target skills that will improve her sports performance.

D) readjust her expectations because she has reached her plateau.

Answer: A

17) Adaptation is defined as

A) the ability of muscles to exert force.

B) subjecting a muscle to more actively than it is used to.

C) a change in the body as a result of overload.

D) the ability to perform motor tasks smoothly.

Answer: C

18) A change in the body that occurs as a result of exercise training is known as

A) homeostasis.

B) metabolic equivalent.

C) training effect.

D) overload.

Answer: C

19) The dose-response relationship states that the amount of adaptation you can expect from exercise directly relates to

A) the amount of overload incorporated into the program.

B) the time of day you exercise.

C) the specific body system that is stressed.

D) the order in which you perform different types of training.

Answer: A

20) To progress safely and improve fitness, it is recommended that you

A) increase overload frequency by no more than 20% each time you make changes in your program.

B) increase overload frequency and intensity by 20% each time you make changes in your program.

C) increase overload intensity and duration by 10% each time you make changes in your program.

D) increase overload frequency, intensity, or duration by no more than 10% each time you make changes in your program.

Answer: D

21) Sally is currently jogging 3 times per week for 30 minutes. She has become comfortable with this workout and now wants to increase her workout time. Using the principle of progression, Sally should increase her time to approximately \_\_\_\_\_\_\_\_ minutes.

A) 33

B) 36

C) 39

D) 42

Answer: A

22) The principle that only the body systems worked during training will show adaptations is known as

A) individuality.

B) specificity.

C) reversibility.

D) frequency.

Answer: B

23) The principle that states that training levels will decrease towards initial levels when training is stopped is known as

A) individuality.

B) specificity.

C) reversibility.

D) frequency.

Answer: C

24) Jim and Steve have been working out together for 3 months. Although they have been doing the same workout, Steve has shown faster improvement. This difference in their responses to exercise illustrates the principle of

A) separateness.

B) individuality.

C) recuperation.

D) mind over body.

Answer: B

25) The principle of rest and recovery is aimed at preventing

A) boredom.

B) cross-training.

C) overtraining.

D) individuality.

Answer: C

26) How many minutes of *moderate* physical activity should an adult perform each week to maintain health?

A) 75 minutes

B) 60 minutes

C) 150 minutes

D) 200 minutes

Answer: C

27) The physical activity pyramid

A) relates nutritional goals to physical activity levels.

B) consists of layers of types of physical activity and gives recommendations for each.

C) excludes sedentary activities.

D) includes aerobic activities but not muscular training.

Answer: B

28) According to the physical activity pyramid, individuals should work on muscular fitness

A) every day.

B) 5 days per week.

C) 2 days per week.

D) 1 day per week.

Answer: C

29) Activities at the top of the physical activity pyramid represent activities

A) that are the most important to improving fitness.

B) related to flexibility training.

C) that are the most vigorous in nature.

D) that you should spend the least amount of time on.

Answer: D

30) Both the American College of Sports Medicine and the U.S. Department of Health and Human Services recommend at least \_\_\_\_\_\_\_\_ minutes of exercise daily for youth under the age of 18.

A) 20

B) 30

C) 40

D) 60

Answer: D

31) The FITT formula is used to

A) design a safe and effective exercise program.

B) determine how much water to consume during exercise.

C) estimate energy expenditure.

D) estimate body composition.

Answer: A

32) Resistance training intensity is usually measured by the

A) amount of weight lifted.

B) heart rate during lifts.

C) speed with which you lift the weights.

D) size of the muscles when contracted during activity.

Answer: A

33) Exercise intensity is most closely related to

A) how often you exercise.

B) how hard you exercise.

C) how many minutes you exercise.

D) how many modes of exercise you use.

Answer: B

34) The components of the FITT formula are

A) frequency, intensity, time, and type.

B) fitness, intensity, training, and type.

C) frequency, individuality, time, and training.

D) fitness, individuality, time, and type.

Answer: A

35) The times per week that an activity is performed is known as

A) frequency.

B) intensity.

C) time.

D) type.

Answer: A

36) The duration of the exercise is known as

A) frequency.

B) intensity.

C) time.

D) type.

Answer: C

Diff: 1 Page Ref: 38

Skill: Remembering

Section: 2.5

LO: 2.5

37) The mode of activity chosen is known as

A) frequency.

B) intensity.

C) time.

D) type.

Answer: D

38) John is getting ready to do bench presses. After doing some jumping jacks and light rowing activity, he begins to concentrate on range-of-motion exercises for his shoulders. John has moved from the \_\_\_\_\_\_\_\_ phase to the \_\_\_\_\_\_\_\_ phase of warm-up.

A) gradual; intense

B) general; specific

C) rest; exercise

D) basic; core

Answer: B

39) When performing range-of-motion exercises, your movements should be \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_.

A) fast; purposeful

B) forceful; repetitive

C) relaxed; controlled

D) slow; powerful

Answer: C

40) Which of the following is a purpose of the exercise warm-up?

A) decrease blood flow

B) decrease body temperature

C) increase muscle elasticity

D) increase lean mass

Answer: C

41) A primary purpose of the general cool-down is to slowly return \_\_\_\_\_\_\_\_ back to resting levels.

A) breathing rate

B) muscle elasticity

C) free fatty acids

D) blood sugar level

Answer: A

42) How long should the exercise-to-rest transition take?

A) 20 to 30 minutes

B) 5 to 15 minutes

C) 2 to 3 minutes

D) less than 1 minute

Answer: B

43) Stretching exercise should be performed

A) before the general warm-up.

B) during the general warm-up.

C) at the beginning of the specific warm-up.

D) at the end of the specific warm-up.

Answer: D

Diff: 2 Page Ref: 41

Skill: Understanding

Section: 2.6

LO: 2.6

44) During the specific cool-down, you should

A) perform a less vigorous form of the activity done during your workout.

B) try to lower your body temperature quickly.

C) stretch the muscle groups worked during the activity.

D) keep the heart rate elevated as much as possible.

Answer: C

45) If you have a light snack prior to exercising, it should be consumed at least \_\_\_\_\_\_\_\_ minutes prior to beginning the activity.

A) 10

B) 15

C) 20

D) 30

Answer: D

46) General recommended guidelines for water intake prior to exercise are approximately \_\_\_\_\_\_\_\_ ounces of fluid 2 to 3 hours before exercise and \_\_\_\_\_\_\_\_ ounces 10 to 20 minutes prior to exercise.

A) 5; 5

B) 8; 10

C) 10; 15

D) 18; 8

Answer: D

47) The most important aspect of footwear is

A) proper fit.

B) color scheme.

C) cost.

D) brand.

Answer: A

48) Which factor has the least impact on designing an exercise program?

A) age

B) weight

C) current fitness level

D) gender

Answer: D

49) Kristina's mom wants to begin an exercise program. However, she is overweight and concerned about the impact exercise might have on her knees. To decrease her chance of injury, Kristina might recommend that her mom try

A) weight-bearing activities.

B) additional stretching exercises.

C) cross-training.

D) balance exercises.

Answer: C

50) People older than 55 are encouraged to include balance training in their exercise program, to reduce the risk of

A) falls.

B) diabetes.

C) heart disease.

D) Alzheimer's disease.

Answer: A

51) Men over 45 and women over 55 should obtain \_\_\_\_\_\_\_\_ before beginning an exercise program.

A) a personal trainer

B) permission from their doctor

C) a fitness magazine

D) life insurance

Answer: B

52) Which of the following conditions would always require a medical clearance before exercising?

A) migraines

B) overweight

C) diabetes

D) cold

Answer: C

53) If you take either prescription or over-the-counter medications, before exercising you should

A) take only half the recommended dosage.

B) ask a physician about potential side effects.

C) avoid taking the medicine.

D) check the Internet to see if other people take it before exercise.

Answer: B

54) What percentage of adults in the United States are physically inactive?

A) 6%

B) 19%

C) 23%

D) 43%

Answer: C

55) When planning your fitness program, which of the following is the best question to ask yourself?

A) How many calories do I want to burn?

B) What motivates me?

C) What activity is most popular with my friends?

D) Which exercise will help me to lose weight the fastest?

Answer: B

56) If you understand your \_\_\_\_\_\_\_\_, you can plan activities in a way that makes you more likely to stick with the program.

A) cardiovascular system

B) body's physiology

C) respiratory rate

D) motivations

Answer: D

57) Your friend plays on the intramural soccer team. You notice one week that she is spending more time than usual running in the mornings and practicing kicking goals in the afternoon. When you ask about her intensity, she explains that she has a big game coming up and that she is determined to win. Which of the following is her chief motivation for exercise?

A) competition

B) socializing

C) losing weight

D) having fun

Answer: A

58) \_\_\_\_\_\_\_\_ barriers to physical activity include both external/physical factors and social/interpersonal factors that may make it harder or easier for you to exercise.

A) Physiological

B) Psychological

C) Environmental

D) Personal

Answer: C

59) \_\_\_\_\_\_\_\_ barriers to physical activity include personal and physical factors affecting exercise participation.

A) Physiological

B) Psychological

C) Environmental

D) Personal

Answer: D

60) To counter a lack of motivation, you should choose exercise that is

A) challenging and repetitive.

B) fun and convenient.

C) easy and low-impact.

D) risky and impressive.

Answer: B

61) Actions that can be performed daily by beginning exercisers are

A) exercise training.

B) lifestyle physical activities.

C) vigorous physical activities.

D) sports activities.

Answer: B

62) Aerobic exercise, weight lifting, and yoga are all examples of

A) exercise training.

B) lifestyle physical activities.

C) moderate physical activities.

D) sports activities.

Answer: A

63) Golf, tennis, and soccer are all examples of

A) exercise training.

B) lifestyle physical activities.

C) team sport activities.

D) individual sport activities.

Answer: D

2.2 True/False Questions

1) Increased levels of body fat put an individual at risk for diabetes.

Answer: TRUE

2) Fitness gains diminish in about half the time it takes to acquire them.

Answer: TRUE

3) During resistance training, the majority of the training adaptations occur during the workout.

Answer: FALSE

4) The exercise-to-rest transition during the cool-down should last at least 20 minutes.

Answer: FALSE

5) The chances of dehydration affecting performance are greater than the chances of food intake affecting performance.

Answer: TRUE

6) The most important aspect of proper footwear is the cost of the shoe.

Answer: FALSE

7) If you have a physical disability such as poor balance, you should not exercise.

Answer: FALSE

8) Individuals who are in wheelchairs may use most strength-training machines that involve a seated position.

Answer: TRUE

9) People with asthma should obtain a medical clearance before beginning an exercise program.

Answer: TRUE

10) Individuals with significant bone or joint problems should develop a workout plan focusing on high-impact exercises.

Answer: FALSE

11) People who are underweight are at a higher risk for musculoskeletal injuries because of increased stress on their muscles and joints.

Answer: FALSE

12) You live in a part of the country where it rains much of the time, which keeps you from being able to go for a nice run outside. The rain is an example of a personal barrier to physical activity.

Answer: FALSE

13) To successfully stick with a fitness program, you must incorporate it into your schedule.

Answer: TRUE

14) People who state that they don't have time for exercise may not consider exercise to be a top priority.

Answer: TRUE

15) Gardening is an example of a lifestyle physical activity.

Answer: TRUE

16) The farther away an exercise facility is from your home, school, or work, the less likely you are to use it.

Answer: TRUE

17) Before choosing an exercise facility, it is important to consider its location, hours of operation, and costs.

Answer: TRUE

18) Living in an area where there is great urban sprawl can reduce the likelihood that one will exercise regularly.

Answer: TRUE

19) It is more difficult to decide to change a behavior than to commit to changing it.

Answer: FALSE

20) External exercise rewards commonly involve feeling better about yourself, feeling healthier, and having better life satisfaction from exercising.

Answer: FALSE

1) Name and describe each of the five health-related components of fitness. Give examples of how you would design a program to improve each component.

Answer: The five health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility, and body composition. Answers will vary for designing the program to improve each component.

2) Discuss the principles of fitness and how they contribute to the design of a fitness program.

Answer: The principles of fitness are overload, progression, specificity, reversibility, individuality, and rest and recovery. Answers will vary regarding their contribution to a fitness program.

3) Compare and contrast physical activity recommendations from two different governmental agencies or professional organizations.

Answer: Answers will vary but could include recommendations from the President's Council on Physical Fitness, The American College of Sports Medicine, the American Heart Association, the U.S. Department of Health and Human Services, the World Health Organization, *Healthy People 2020*, or the Physical Activity Pyramid.

4) Describe the physical activity pyramid and its components. Provide specific recommendations with respect to frequency and time where appropriate.

Answer: Answers will vary.

5) Using the FITT formula, design a sample fitness program. Make sure your program includes both a warm-up and cool-down component.

Answer: Answers will vary.

6) List five factors that should be considered when developing a fitness program. For each, explain how this factor might contribute to the overall program design.

Answer: Five factors to consider are age, weight, current fitness level, and disabilities and special health concerns, if any. Answers will vary regarding how each contributes to the fitness program.