

Fundamentals of Exercise Science

Exercise Science · Practice Test · 15 Questions

1. Which muscle fiber type is primarily responsible for explosive, short-duration movements like sprinting?

- A) Type I fibers
- B) Type IIb fibers
- C) Cardiac muscle
- D) Smooth muscle

2. What is the primary energy substrate used by the body during high-intensity anaerobic exercise?

- A) Glycogen
- B) Stored fat
- C) Protein
- D) Fiber

3. Which heart rate zone is typically associated with the 'anaerobic threshold'?

- A) 50-60% of Max HR
- B) 60-70% of Max HR
- C) 80-90% of Max HR
- D) 40-50% of Max HR

4. What is the anatomical name for the large muscle located on the back of the upper arm?

- A) Biceps brachii
- B) Deltoid
- C) Triceps brachii
- D) Brachialis

5. What is the process called when muscles increase in size due to resistance training?

- A) Atrophy
- B) Hypertrophy
- C) Flexibility
- D) Aerobic capacity

6. Which nutrient is most critical for the repair and growth of muscle tissue after exercise?

- A) Carbohydrates
- B) Fats
- C) Protein
- D) Vitamin C

7. What is the term for the maximum amount of oxygen the body can utilize during intense exercise?

- A) Vital capacity
- B) VO2 max
- C) Cardiac output
- D) Stroke volume

8. Which plane of motion divides the body into front (anterior) and back (posterior) halves?

- A) Sagittal plane
- B) Frontal plane
- C) Transverse plane
- D) Horizontal plane

9. What connective tissue attaches muscle to bone?

- A) Ligament
- B) Cartilage
- C) Tendon
- D) Fascia

10. Which of the following is a benefit of static stretching performed after a workout?

- A) Increased explosive power
- B) Immediate muscle growth
- C) Improved range of motion
- D) Higher resting heart rate

11. What does the 'F' in the FITT principle of exercise prescription stand for?

- A) Force
- B) Frequency
- C) Fatigue
- D) Flexibility

12. Which organ is responsible for the removal of waste products like lactic acid from the blood?

- A) Lungs
- B) Liver
- C) Stomach
- D) Pancreas

13. What is the term for exercise performed without the presence of sufficient oxygen?

- A) Aerobic
- B) Anaerobic
- C) Isometric
- D) Isokinetic

14. Which bone is commonly known as the 'thigh bone'?

- A) Tibia
- B) Fibula
- C) Humerus
- D) Femur

15. What is the primary function of red blood cells during physical activity?

- A) Clotting the blood
- B) Transporting oxygen
- C) Storing energy
- D) Fighting infection