

Exercise Science Foundations

Physical Education · Practice Test · 15 Questions

1. Which organ is primarily responsible for pumping oxygenated blood to the muscles during exercise?

- A) Lungs
- B) Heart
- C) Liver
- D) Kidneys

2. What is the primary energy source used by the body for high-intensity physical activity?

- A) Protein
- B) Fat
- C) Glucose
- D) Fiber

3. Which of the following is considered a component of health-related physical fitness?

- A) Reaction time
- B) Agility
- C) Cardiovascular endurance
- D) Speed

4. What occurs in the muscles during a period of rest after exercise to improve performance?

- A) Atrophy
- B) Repair and recovery
- C) Dehydration
- D) Muscle loss

5. Which term refers to the maximum amount of oxygen the body can utilize during intense exercise?

- A) VO2 max
- B) Resting heart rate
- C) Blood pressure
- D) Tidal volume

6. What are the microscopic functional units of a muscle fiber that allow it to contract?

- A) Neurons
- B) Sarcomeres
- C) Capillaries
- D) Ligaments

7. Which type of exercise is specifically designed to strengthen bones through impact?

- A) Swimming
- B) Weight-bearing exercise
- C) Yoga
- D) Stretching

8. What is the main function of ligaments in the human body?

- A) Connect bone to bone
- B) Connect muscle to bone
- C) Produce red blood cells
- D) Transport oxygen

9. What is the standard unit used to measure the energy content of food and physical activity?

- A) Celsius
- B) Kilojoules
- C) Milliliters
- D) Grams

10. Which energy system provides rapid energy for short bursts of activity like sprinting?

- A) Aerobic system
- B) Anaerobic system
- C) Digestive system
- D) Immune system

11. Which mineral is essential for proper muscle contraction and nerve transmission?

- A) Calcium
- B) Iron
- C) Zinc
- D) Magnesium

12. What is the primary role of the respiratory system during physical exertion?

- A) To digest food for energy
- B) To exchange carbon dioxide for oxygen
- C) To regulate body temperature
- D) To store fat for later use

13. Which fitness principle suggests that the body adapts to the specific type of demand placed upon it?

- A) Overload
- B) Specificity
- C) Progression
- D) Reversibility

14. What happens to the heart rate as a person's cardiovascular fitness level improves?

- A) It increases at rest
- B) It decreases at rest
- C) It stays the same
- D) It becomes irregular

15. Which structure connects skeletal muscle to bone, enabling movement?

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