

Exercise Science Fundamentals

Exercise Science · Answer Key · 20 Questions

1. In what year was the American College of Sports Medicine (ACSM) founded?

- A) 1954**
- B) 1960
- C) 1975
- D) 1982

2. Approximately how many bones are in the adult human skeleton?

- A) 186
- B) 206**
- C) 226
- D) 256

3. Who is often referred to as the 'Father of Aerobics' for his 1968 book on the subject?

- A) Kenneth Cooper**
- B) Jack LaLanne
- C) Arnold Schwarzenegger
- D) Arthur Jones

4. What is the standard resting heart rate range (in beats per minute) for a healthy adult?

- A) 30-50
- B) 60-100**
- C) 110-140
- D) 150-180

5. Which muscle is the largest muscle in the human body by volume?

- A) Biceps brachii
- B) Gluteus maximus**
- C) Rectus abdominis
- D) Trapezius

6. How many chambers does the human heart have?

- A) Two
- B) Three
- C) Four**
- D) Six

7. The 'FITT' principle stands for Frequency, Intensity, Time, and what?

- A) Tolerance
- B) Technique
- C) Type**
- D) Temperature

8. What is the recommended minimum number of minutes of moderate-intensity aerobic physical activity per week for adults?

- A) 60 minutes
- B) 90 minutes
- C) 150 minutes**
- D) 300 minutes

9. In which decade did the first 'Nautilus' exercise machines, created by Arthur Jones, hit the commercial market?

- A) 1950s
- B) 1960s
- C) 1970s**
- D) 1980s

10. Approximately what percentage of the human body weight is composed of water?

- A) 40%
- B) 60%**
- C) 80%
- D) 90%

11. What is the unit of measurement used to express the energy expenditure of physical activities?

- A) Metabolic Equivalent (MET)**
- B) Newton
- C) Joule
- D) Watt

12. Which of these is a measure of body composition?

- A) BMI**
- B) VO2 Max
- C) 1RM
- D) RPE

13. At what age did the Olympic Games first allow women to compete in marathons?

- A) 1956
- B) 1984**
- C) 1996
- D) 2004

14. What is the maximum number of ATP molecules produced through aerobic respiration from one molecule of glucose?

- A) 2
- B) 4
- C) 32**
- D) 64

15. How many pairs of ribs does a standard human have?

- A) 10
- B) 12**
- C) 14
- D) 16

16. Which vitamin is primarily synthesized in the human skin through exposure to ultraviolet light?

- A) Vitamin A
- B) Vitamin C
- C) Vitamin D**
- D) Vitamin K

17. What is the primary function of the SA node in the human heart?

- A) Pumping blood
- B) Natural pacemaker**
- C) Filtering waste
- D) Oxygenating blood

18. How many phases are there in the standard 'Periodization' model for athletes?

- A) Two
- B) Three**
- C) Four
- D) Five

19. What was the first year that the 'Special Olympics' were held?

A) 1968

B) 1972

C) 1980

D) 1988

20. Which protein filament is considered the 'thick' filament in muscle contraction?

A) Actin

B) Myosin

C) Troponin

D) Tropomyosin