Physical Education Studies
Year 11 ATAR

CHAPTER 5:
Exercise Physiology

NEXT

Welcome to the quiz for Chapter 5

- You will be given 30 multiple choice questions
- Click on the correct answer
- Use the links to navigate through the quiz
- To finish the test you must answer all the questions correctly

ARE YOU READY?

Question 1

Which of the following represents the order in which energy sources are used by the body?

A. Fats, proteins, carbohydrates

B. Proteins, fats, carbohydrates

C. Carbohydrate, fats, proteins

D. Carbohydrates, proteins, fats

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 2

Which energy system is used for short bursts of activity – up to 10 seconds?

A. Aerobic system

B. ATP-CP system

C. Lactic acid system

D. PC system

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 3

Which energy system is used to complete a 400 m sprint?

A. Aerobic system

B. ATP-CP system

C. Lactic acid system

D. PC system

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 4

Which energy system has the greatest capacity for ATP production?

A. Aerobic system

B. ATP-CP system

C. Lactic acid system

D. PC system

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 5

What is VO_2 max?

A. The energy used during the oxygen deficit period

B. An individual's capacity for aerobic ATP production

C. A steady state of oxygen consumption

D. The volume of oxygen consumed when sprinting

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 6

Which of the following activities would use 50% anaerobic and 50% aerobic energy?

A. Discus throw

B. Jogging

C. Boxing

D. Soccer

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 7

What is oxygen debt?

A. The amount of oxygen consumed during the recovery period

B. The amount of oxygen owed to the muscles by the ATP-PC system

C. The oxygen consumption difference between anaerobic and aerobic exercise

D. The amount of oxygen consumed by the aerobic energy system

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 8

What is the primary fuel for energy production?

A. ATP

B. Carbohydrates

C. Fats

D. Water

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 9

For how long are muscle stores of glycogen likely to last?

A. 5 minutes

B. 5 hours

C. 2 hours

D. 30 minutes

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 10

How long does it take to replenish glycogen stores following a glycogen-depleting bout of exercise?

A. 20 hours

B. 10 hours

C. 5 hours

D. 1 hour

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 11

Why does the cardiorespiratory system need to respond to the body exercising?

A. Because a decrease in oxygen uptake is required

B. Because the working muscles require more fuel and produce more waste

C. Because blood distribution needs to remain constant

D. To ensure a greater supply of carbon dioxide to muscle cells

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 12

Which of the following is NOT an immediate effect of physical activity?

A. Increased heart rate

B. Increased blood pressure

C. Decreased stroke volume

D. Increased ventilation

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 13

Why does cardiac output increase due to physical exertion?

A. Because the blood gets thinner and is easier to pump

B. In order to provide increased amounts of fuel and oxygen to working muscles

C. In order to pump greater amounts of ATP to working muscles

D. Because the heart increases in size during exercise

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 14

Why does the arteriovenous oxygen difference increase during exercise?

A. Because the venous oxygen concentration decreases

B. Because the venous oxygen concentration increases

C. Because the arterial oxygen concentration decreases

D. Because the arterial oxygen concentration increases

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 15

What is the overall effect of all the immediate responses of the cardiorespiratory system to exercise?

A. A greater use of the ATP-PC energy system

B. Increased cardiac output

C. An improved level of fitness

D. An increase in the amount of oxygen delivered to and used by the working muscles

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 16

Which of the following activities would result in the highest heart rate?

A. Walking for 2 minutes

B. Sit-ups for 30 seconds

C. Step-ups onto a bench for 2 minutes

D. Jogging for 2 minutes

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 17

Which of the following is NOT a long-term effect of training on the body?

A. Increased stroke volume

B. Increased blood volume

C. Greater aerobic capacity

D. Greater anaerobic capacity

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 18

Why does a trained athlete have a faster recovery after exercise?

A. Because their blood pressure approximates normal

B. Due to the increased size and number of the vessels carrying blood to and from working muscles

C. Due to a reduced cardiac output which places less strain on the heart

D. Due to an increase in the size of muscle fibres

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 19

Which of the following is NOT a long-term adaptation of the musculoskeletal system?

A. Muscle hypertrophy

B. Increased flexibility

C. Increased ATP-PC system capacity

D. Increased levels of haemoglobin

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 20

During bouts of maximum physical activity, by what percentage can oxygen utilisation increase?

A. 2,000 %

B. 200%

C. 20%

D. 2%

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 21

Which of the following is NOT a component of health-related fitness?

A. Cardiorespiratory endurance

B. Balance

C. Flexibility

D. Body composition

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 22

Which of the following is NOT a component of performance-related fitness?

A. Power

B. Speed

C. Muscular strength

D. Coordination

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 23

Individuals with a higher proportion of slow-twitch muscle fibres have a greater capacity for which of the following?

A. Muscle endurance

B. Flexibility

C. Muscle strength

D. Balance

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 24

Individuals with a higher proportion of fast-twitch muscle fibres have a greater capacity for which of the following?

A. Muscle endurance

B. Flexibility

C. Muscle strength

D. Balance

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 25

Which of the following in NOT a training principle?

A. Specificity

B. Progressive overload

C. Reversibility

D. Maximum output

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 26

Which of the following is NOT a factor is achieving progressive overload?

A. Duration

B. Intensity

C. Specificity

D. Frequency

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 27

Training at which of the following heart rates that will result in fitness improvement?

A. Target heart rate

B. Maximum heart rate

C. VO_2 max

D. Resting heart rate

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 28

Anaerobic threshold is reached when you are working at which of the following?

A. 50% of your maximum heart rate

B. 85% of your maximum heart rate

C. 30% of your maximum heart rate

D. 100% of your maximum heart rate

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 29

Which of the following training methods would you use to improve speed?

A. Continuous training

B. Resistance training

C. Dynamic stretching training

D. Interval training

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT QUESTION

Question 30

Which of the following training methods would you use to improve muscular endurance?

A. Continuous training

B. Fartlek training

C. Dynamic stretching training

D. Interval training

TRY AGAIN...

BACK TO QUESTION

THAT'S CORRECT!

NEXT

CONGRATULATIONS!

YOU HAVE COMPLETED THE CHAPTER 5 QUIZ