

GCSE P.E. questions and mark schemes

1 a Applied Anatomy and Physiology

1. Which one of the following is NOT a function of the skeleton?

- A. Allows movement at a joint
- B. Gives the body shape
- C. Pulls tendons
- D. Provides a point of attachment for muscles

C

2. Which one of the following is NOT a function of the skeleton?

- A. Produces red blood cells
- B. Stores calcium
- C. Protects organs
- D. Produces hormones

D

3. Which one of the following is NOT a function of the skeleton?

- A. Stores fat
- B. Allows movement
- C. Gives shape
- D. Supports organs

A

4. Which one of the following correctly identifies the part of the skeleton that produces red blood cells?

- A. Flat bones
- B. Vertebrae
- C. Long bones
- D. Short bones

C

5. Which one of the following parts of a synovial joint produces the synovial fluid?

- A. Bursa
- B. Cartilage
- C. Synovial membrane
- D. Ligaments

C

6. Which one of the following parts of a synovial joint is a fluid-filled bag?

- A. Capsule
- B. Bursa
- C. Synovial membrane
- D. Ligaments

B

7. Which one of the following correctly identifies the function of the articular cartilage in a synovial joint?
- A. Attaches bone to muscle
 - B. Reduces friction between bones
 - C. Prevents dislocations
 - D. Produces synovial fluid

B

8. Which one of the following is NOT a function of cartilage?
- A. Absorbs shocks
 - B. Lubricates the joint
 - C. Protects the ends of bones
 - D. Reduces friction

B

9. Which one of the following facts is NOT true about the elbow joint?
- A. Contains three bones
 - B. Works as a second-class lever system
 - C. The triceps causes extension
 - D. Is a hinge joint

B

10. Which one of the following is correct about the elbow joint?
- A. Extension occurs due to the action of the triceps
 - B. Flexion occurs due to action of the triceps
 - C. Hyperextension occurs due to action of the triceps
 - D. Extension occurs due to action of the biceps

A

11. Which one of the following is NOT correct about the elbow joint?
- A. Formed from radius, ulna and humerus
 - B. Moved by triceps and biceps muscles
 - C. Type of ball and socket joint
 - D. Moves through the transverse plane

C

12. When the biceps contract, which one of the following is correct?
- A. The triceps also contracts
 - B. The biceps act as an antagonist muscle
 - C. Extension occurs
 - D. The angle at the hinge joint decreases

D

13. Which one of the following facts is NOT true about the shoulder joint?
- A. Contains three bones
 - B. Works as a third-class lever system
 - C. The deltoid causes abduction
 - D. Is a ball and socket joint

A

14. Which one of the following is correct about the shoulder joint?

- A. Abduction occurs due to the action of the triceps
- B. Adduction occurs due to action of the latissimus dorsi
- C. Flexion occurs due to action of the deltoid
- D. Extension occurs due to action of the pectorals

B

15. Which one of the following is NOT correct about the shoulder joint?

- A. Formed from clavicle, scapula and humerus
- B. Formed from the clavicle and humerus
- C. Formed from the humerus and scapula
- D. Formed from the clavicle and scapula

A

16. Which one of the following is NOT correct about the shoulder joint?

- A. The triceps contracts to cause flexion
- B. The rotator cuff muscles act as an agonist muscle during rotation
- C. Extension occurs when the latissimus dorsi contracts
- D. Abduction is when the arm moves away from the body

A

17. Which one of the following is NOT correct about the shoulder joint?

- A. It is a synovial joint
- B. It is formed from three bones
- C. It is a ball and socket joint
- D. It is easily dislocated

C

18. Which one of the following facts is NOT true about the knee joint?

- A. Contains two bones
- B. Works as a third-class lever system
- C. The quadriceps cause flexion
- D. Is a hinge joint

C

19. Which one of the following is correct about the knee joint?

- A. Extension occurs due to the action of the quadriceps
- B. Flexion occurs due to action of the quadriceps
- C. Extension occurs due to action of the hamstrings
- D. Flexion occurs due to action of the gluteals

A

20. Which one of the following is correct about the knee joint?

- A. Formed from tibia, fibula and femur
- B. Formed from tibia and femur
- C. Formed from patella, fibula and femur
- D. Formed from tibia, patella and femur

B

21. Which one of the following is correct about the knee joint?

- A. Formed from tibia, fibula and femur
- B. Moved by quadriceps and hamstring muscles
- C. Type of ball and socket joint
- D. Moves through the longitudinal plane

C

22. When the quadriceps contract, which one of the following is correct?

- A. The hamstrings also contract
- B. The quadriceps act as an antagonist muscle
- C. Extension occurs
- D. The angle at the hinge joint decreases

C

23. Which one of the following facts is correct about the hip joint?

- A. Contains two bones
- B. Works as a first-class lever system
- C. The gluteals causes flexion
- D. Is a hinge joint

B

24. Which one of the following is correct about the hip joint?

- A. Extension occurs due to the action of the quadriceps
- B. Flexion occurs due to action of the quadriceps
- C. Extension occurs due to action of the gluteals
- D. Flexion occurs due to action of the hamstrings

C

25. Which one of the following is correct about the hip joint?

- A. Formed from tibia and femur
- B. Moved by gluteal and hamstring muscles
- C. Type of ball and socket joint
- D. Moves through the longitudinal axis

C

26. When the gluteals contract, which one of the following is correct?

- A. The hip flexors also contract
- B. The quadriceps act as an antagonist muscle
- C. Extension occurs
- D. The angle at the hinge joint decreases

C

27. Which one of the following facts is NOT true about the ankle joint?

- A. Contains two bones
- B. Works as a second-class lever system
- C. The gastrocnemius causes plantar flexion
- D. Is a hinge joint

A

28. Which one of the following is correct about the ankle joint?
- A. Dorsi-flexion occurs due to the action of the gastrocnemius
 - B. Plantar flexion occurs due to action of the gastrocnemius
 - C. Extension occurs due to action of the tibialis anterior
 - D. Flexion occurs due to action of the tibialis anterior

B

29. Which one of the following is correct about the ankle joint?
- A. Formed from tibia and talus
 - B. Moved by tibialis anterior and gastrocnemius muscles
 - C. Type of ball and socket joint
 - D. Moves through the transverse plane

B

30. When the gastrocnemius contracts, which one of the following is correct?
- A. The tibialis anterior also contracts
 - B. The gastrocnemius acts as an agonist muscle
 - C. Extension occurs
 - D. The angle at the hinge joint decreases

B

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1 b Structure and Function of the Cardio-Respiratory System

5. Which one of the following describes the correct order of structures that air passes through before it enters the lungs?
- A. Mouth, bronchi; bronchioles; trachea
 - B. Mouth, trachea, bronchioles, bronchi,
 - C. Mouth, trachea, bronchi, bronchioles
 - D. Mouth, bronchioles, trachea, bronchi

C

6. Which one of the following is NOT a characteristic of bronchioles?
- A. Have rings of cartilage
 - B. Have cilia presence
 - C. Open into alveoli
 - D. Less than 1 mm in diameter

A

7. Which one of the following is NOT a characteristic of alveoli?
- A. Very thin membranes
 - B. Layer of moisture
 - C. Rich blood supply
 - D. Kept open by rings of cartilage

D

8. Which one of the following statements about gas exchange in alveoli is NOT true?
- A. Oxygen moves into blood down a concentration gradient
 - B. Carbon dioxide moves into alveoli down a concentration gradient
 - C. Oxygen moves into alveoli down a concentration gradient
 - D. Carbon dioxide moves out of blood down a concentration gradient

C

9. Which one of the following factors assist the process of diffusion?
- A. The large gap between alveoli and blood capillaries
 - B. The thick membranes
 - C. The layer of moisture
 - D. The lack of a good blood supply

C

10. Which one of the following is NOT a factor that increases the rate of gas exchange in alveoli?
- A. Thin membranes
 - B. Large surface area
 - C. Rich blood supply
 - D. Long distance between capillaries and alveoli

D

11. Which one of the following is the main way that oxygen is carried by haemoglobin in the blood?

- A. As oxyhaemoglobin
- B. As carboxyhaemoglobin
- C. As carbaminohaemoglobin
- D. As oxymyoglobin

A

12. Which one of the following is the correct sequence of events during normal breathing?

- A. Diaphragm relaxes; increased volume in chest; increased pressure in lungs; air sucked in
- B. Diaphragm contracts; increased volume in chest; reduced pressure in lungs; air sucked in
- C. Diaphragm relaxes; increased volume in chest; reduced pressure in lungs; air sucked in
- D. Diaphragm contracts; decreased volume in chest; reduced pressure in lungs; air sucked in

B

13. Which one of the following is the correct sequence of events during expiration at rest?

- A. Diaphragm relaxes; increased volume in chest; reduced pressure in lungs; air forced out
- B. Diaphragm contracts; decreased volume in chest; increased pressure in lungs; air forced out
- C. Diaphragm relaxes; decreased volume in chest; increased pressure in lungs; air forced out
- D. Diaphragm contracts; increased volume in chest; reduced pressure in lungs; air forced out

C

14. Which one of the following describes the mechanics of breathing during exercise?

- A. Pectoral muscles contract; increasing size of chest cavity; abdominals contract; forced expiration
- B. Pectoral muscles contract; decreasing size of chest cavity; abdominals contract; forced expiration
- C. Pectoral muscles contract; increasing size of chest cavity; abdominals relax; forced expiration
- D. Pectoral muscles contract; increasing size of chest cavity; abdominals contract; passive expiration

B

15. Which one of the following definitions of lung volumes is NOT correct?
- A. Tidal Volume is the amount of air entering the lungs during normal inspiration at rest.
 - B. The Inspiratory Reserve Volume can be as high as 3000ml.
 - C. The Expiratory Reserve Volume is the amount of extra air inspired
 - D. Residual Volume is the amount of air left in the lungs following a maximal expiration

C

16. Which one of the following definitions of lung volumes is incorrect?
- A. Tidal Volume is usually about 500 mls
 - B. The Inspiratory Reserve Volume is the amount of extra air inspired
 - C. The Expiratory Reserve Volume is the amount of extra air expired
 - D. Residual Volume is the amount of air left in the lungs following a maximal inspiration

D

17. Which one of the following is the lung volume that does not change during exercise?
- A. Residual volume
 - B. Expiratory reserve volume
 - C. Tidal volume
 - D. Inspiratory reserve volume

A

18. Which one of the following statements concerning blood vessels is correct?
- A. Veins carry blood away from the heart
 - B. Arteries carry blood towards the heart
 - C. Veins carry blood away towards the lungs
 - D. Arteries carry blood away from the heart

D

19. Which one of the following statements about blood flow is correct?
- A. Rings of muscle in the small arteries can relax, increasing their diameter; this is called vasoconstriction
 - B. Rings of muscle in the small arteries can contract, decreasing their diameter; this is called vasoconstriction
 - C. Rings of muscle in the small arteries can contract, increasing their diameter; this is called vasodilation
 - D. Rings of muscle in the small arteries can contract, decreasing their diameter; this is called vasoconstriction

B

20. Which one of the following statements concerning arteries is correct?
- A. Arteries have a small lumen, are elastic and have valves
 - B. Arteries have a large lumen, are elastic and have no valves
 - C. Arteries have a large lumen, are inelastic and have valves
 - D. Arteries have a small lumen, are elastic and have no valves

D

21. Which one of the following statements concerning veins is correct?

- A. Veins have a large lumen, are elastic and have valves
- B. Veins have a small lumen, are inelastic and have valves
- C. Veins have a large lumen, are inelastic and have no valves
- D. Veins have a large lumen, are elastic and have no valves

B

22. Which one of the following statements about capillaries is correct?

- A. Capillaries are thick-walled, wide and have valves
- B. Capillaries are thick-walled, narrow and have no valves
- C. Capillaries are thin-walled, wide and have valves
- D. Capillaries are thin-walled, narrow and have no valves

D

18. Which one of the following statements about the heart is correct?

- A. The right side of the heart takes in deoxygenated blood through the veins
- B. The right side of the heart takes in oxygenated blood through the veins
- C. The left side of the heart takes in deoxygenated blood through the arteries
- D. The left side of the heart takes in oxygenated blood through the arteries

A

19. Which one of the following statements about the cardiac cycle are correct?

- A. In systole, the heart ventricles are relaxed and the heart empties blood
- B. In diastole, the heart ventricles are relaxed and the heart fills with blood.
- C. In systole, the heart ventricles contract and the heart fills with blood
- D. In diastole, the heart ventricles contract and the heart empties blood

B

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20. Which one of the following statements about the cardiac cycle are correct?

- A. During systole, the atria and ventricles are relaxed and the A-V valves are closed
- B. During diastole, the atria and ventricles are relaxed and the A-V valves are closed
- C. During systole, the atria and ventricles are relaxed and the A-V valves are open
- D. During diastole, the atria and ventricles are relaxed and the A-V valves are open

D

21. Which one of the following statements about the cardiac cycle are correct?

- A. During systole the right ventricle contracts, forcing blood along the pulmonary vein towards the lungs
- B. During systole the left ventricle contracts, forcing blood along the pulmonary artery towards the lungs
- C. During systole the right ventricle contracts, forcing blood along the pulmonary artery towards the lungs
- D. During systole the left ventricle contracts, forcing blood along the pulmonary artery towards the lungs

D

22. Which one of the following statements about the heart is correct?

- A. Cardiac Output is the volume of blood that the heart is able to pump out in one beat
- B. Cardiac Output is the volume of blood that the heart is able to pump out in one minute
- C. Stroke volume is the volume of blood that the heart is able to pump out in one minute
- D. Stroke volume is the volume of blood that the heart is able to take in one beat

B

23. Which one of the following statements about the heart is correct?

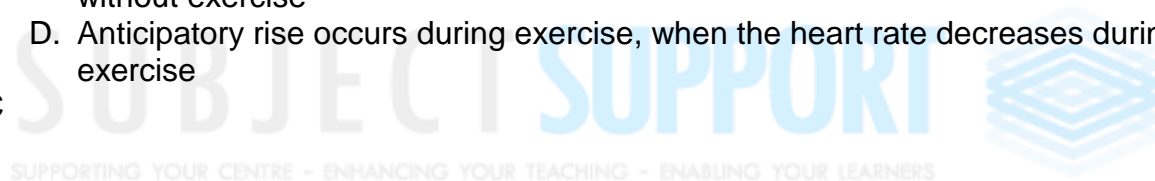
- A. Cardiac Output [Q] = Heart Rate [HR] + Stroke Volume [SV]
- B. Cardiac Output [Q] = Heart Rate [HR] x Stroke Volume [SV]
- C. Cardiac Output [Q] = Heart Rate [HR] - Stroke Volume [SV]
- D. Cardiac Output [Q] = Heart Rate [HR] ÷ Stroke Volume [SV]

B

24. Which one of the following concerning anticipatory rise is correct?

- A. Anticipatory rise occurs before exercise, when the heart rate increases during exercise
- B. Anticipatory rise occurs during exercise, when the heart rate decreases without exercise
- C. Anticipatory rise occurs before exercise, when the heart rate increases without exercise
- D. Anticipatory rise occurs during exercise, when the heart rate decreases during exercise

C



1 c Anaerobic and Aerobic Exercise

1. Which one of the following statements is correct about aerobic energy?
- A. Aerobic energy for muscle contractions is supplied by breaking down glucose using oxygen
 - B. Aerobic energy for muscle contractions is supplied by breaking down muscle using oxygen
 - C. Aerobic energy for muscle contractions is supplied by breaking down glucose without using oxygen
 - D. Aerobic energy for muscle contractions is supplied by breaking down muscle without using oxygen

A

2. Which one of the following statements is correct about anaerobic exercise?
- A. Anaerobic exercise is where the exercise happens in the absence of oxygen
 - B. Anaerobic exercise is where the energy needed for exercise is provided in the presence of oxygen
 - C. Anaerobic exercise is where the energy needed for exercise is provided in the absence of oxygen
 - D. Anaerobic exercise is where energy is not needed for exercise

C

3. Which one of the following statements is correct about aerobic and anaerobic physical activities?
- A. Road cycling and golf putting are examples of activities where the energy is provided anaerobically
 - B. Sprinting and shot putting are examples of activities where the energy is provided anaerobically
 - C. Walking and pole vaulting are examples of activities where the energy is provided aerobically
 - D. Squash and rock climbing are examples of activities where the energy is provided aerobically

B

4. Which one of the following statements concerning team games is correct?
- A. During team games the activities are mainly anaerobic
 - B. During team games the activities are mainly aerobic
 - C. During team games the activities are often both aerobic and anaerobic
 - D. During team games the activities are rarely anaerobic

C

5. Which one of the following reactions summarising aerobic energy production is correct?
- A. $\text{Glucose} + \text{Oxygen} \rightarrow \text{Carbon Dioxide} + \text{Water}$
 - B. $\text{Glucose} \rightarrow \text{Energy} + \text{Carbon Dioxide} + \text{Water}$
 - C. $\text{Glucose} + \text{Oxygen} \rightarrow \text{Energy} + \text{Carbon Dioxide}$
 - D. $\text{Glucose} + \text{Oxygen} \rightarrow \text{Energy} + \text{Carbon Dioxide} + \text{Water}$

D

6. Which one of the following reactions summarising anaerobic energy production is correct?

- A. Glucose → Energy + Oxygen
- B. Sucrose → Energy + Lactic Acid
- C. Glucose + Oxygen → Energy + Carbon Dioxide
- D. Glucose → Energy + Lactic Acid

D

7. Which one of the following correctly identifies E.P.O.C?

- A. Extra Pure Oxygen Calories
- B. Extra Pure Oxygen Consumption
- C. Excess Post-Exercise Oxygen Consumption
- D. Excess Post-Exercise Oxygen Calories

C

8. Which one of the following statements about EPOC is correct?

- A. EPOC occurs because of aerobic exercise
- B. EPOC removes lactic acid
- C. EPOC occurs in anticipation of exercise
- D. EPOC prevents sweating

B

9. Which one of the following statements about the immediate effects of exercise is NOT correct?

- A. Heart rate increases
- B. Breathing rate increases
- C. Oxygen levels increase
- D. Temperature increases

C

10. Which one of the following statements about the short-term effects of exercise is NOT correct?

- A. You get fatigued
- B. You get DOMS
- C. You get dizzy
- D. You get hydrated

D

11. Which one of the following statements concerning a cool down is NOT correct?

- A. Helps prevent the clearing of waste products
- B. Reduces the potential for DOMS
- C. Allows breathing rate to return to resting levels
- D. Allows the heart rate to return to its resting rate

A

12. Which one of the following statements concerning a cool down is NOT correct?

- A. Reduces the potential for DOMS
- B. Reduces the flexibility of muscles
- C. Reduces the chances of dizziness or fainting
- D. Allows the heart rate to return to its resting rate

B

13. Which one of the following is NOT a benefit of massage following exercise?

- A. Helps reduce the pain caused by too much physical activity
- B. Assists rehydration
- C. Relieve delayed onset muscle soreness
- D. Reduce the swelling in muscles that may be causing the stiffness in newly exercising muscles.

B

14. Which one of the following is NOT a long-term effect of regular exercise?

- A. Improved stamina
- B. Improved flexibility
- C. Improved health
- D. Improved strength

C

15. Which one of the following is correct about hypertrophy?

- A. Hypertrophy is an increase in bone density
- B. Hypertrophy is a decrease in fat content
- C. Hypertrophy is an increase in heart mass
- D. Hypertrophy is an increase in prize money

C

16. Which one of the following is correct about bradycardia?

- A. Bradycardia is a reduced resting heart rate
- B. Bradycardia is an increased stroke volume
- C. Bradycardia is an increased cardiac output
- D. Bradycardia is an increase in heart muscle

A

17. Which one of the following statements about the long-term effects of exercise is NOT correct?

- A. Hypertrophy occurs
- B. Bradycardia occurs
- C. Dehydration occurs
- D. Maturation occurs

D

18. Which one of the following statements about the long-term effects of training is NOT correct?
- A. Strength may improve
 - B. Stamina may improve
 - C. IQ may improve
 - D. Flexibility may improve

C



2 Movement Analysis

1. Which one of the following are correct about levers systems?
- A. First class levers contain a resistance between the effort and the fulcrum
 - B. Second class levers contain fulcrum a between the effort and the resistance
 - C. Third class levers contain an effort between the fulcrum and the resistance
 - D. None of the above are correct

C

2. Which one of the following are correct about first class lever systems?
- A. The resistance is in-between the effort and fulcrum
 - B. An example is when extension occurs at the knee
 - C. The resistance and effort are either side of the fulcrum
 - D. An example is plantar flexion at the ankle

C

3. Which one of the following are correct about second class lever systems?
- A. The resistance is in-between the effort and fulcrum
 - B. An example is when extension occurs at the knee
 - C. The resistance and effort are either side of the fulcrum
 - D. An example is dorsi flexion at the ankle

A

4. Which one of the following are correct about third class lever systems?
- A. The resistance is in-between the effort and fulcrum
 - B. An example is when extension occurs at the knee
 - C. The resistance and effort are either side of the fulcrum
 - D. An example is plantar flexion at the ankle

B

5. Which one of the following describes mechanical advantage?
- A. The rapid movement of the ankle joint
 - B. The limited range of movement at the elbow
 - C. The large force that can be applied at the ankle
 - D. The slow movement at the elbow

C

6. Which one of the following describes mechanical advantage?
- A. The slow movement of the ankle joint
 - B. The large range of movement at the elbow
 - C. The small force that can be applied at the ankle
 - D. The slow movement at the elbow

B

7. Which one of the following is correct about levers systems?
- A. The effort arm is the distance between the effort and the resistance
 - B. The resistance arm is the distance between the resistance and the load
 - C. The effort arm is the distance between the resistance and the fulcrum
 - D. The resistance arm is the distance between the fulcrum and the load

D

8. Which one of the following is correct about actions in the arm?

- A. When the biceps contract the arm straightens
- B. When the triceps contracts the arm bends
- C. When the biceps contract the arm bends
- D. When the triceps and biceps contracts the arm straightens

C

9. Which one of the following is correct about actions in the arm?

- A. When the biceps contracts, the arm bends and the biceps is the antagonist
- B. When the triceps contracts, the arm straightens and the triceps is the antagonist
- C. When the biceps contracts, the arm bends and the biceps is the agonist
- D. When the triceps contracts, the arm straightens and the biceps is the agonist

C

10. Which one of the following is correct about tendons and ligaments?

- A. Tendons attach muscles to bones
- B. Ligaments attach bones to muscles
- C. Tendons attach bones to joints
- D. Ligaments attach muscles to joints

A

11. Which one of the following is correct about muscle contractions?

- A. During eccentric contractions the muscle lengthens
- B. During concentric contractions the muscle lengthens
- C. During isometric contractions the muscle shortens
- D. During isometric contractions the muscle lengthens

A

12. Which one of the following is correct about leg action?

- A. Leg action during running takes place in the frontal plane and around a longitudinal axis
- B. Leg action during running takes place in the transverse plane and around a frontal axis
- C. Leg action during running takes place in the longitudinal plane and around a sagittal axis
- D. Leg action during running takes place in the sagittal plane and around a transverse axis

D

13. Which one of the following is correct about planes and axes?

- A. Arm action during a cartwheel takes place in the frontal plane and around a sagittal axis
- B. Arm action during a cartwheel takes place in the transverse plane and around a frontal axis
- C. Arm action during a cartwheel takes place in the sagittal plane and around a longitudinal axis
- D. Arm action during a cartwheel takes place in the longitudinal plane and around a transverse axis

A

14. Which one of the following is correct about planes and axes?
- A. Body action during an ice skating spin takes place in the longitudinal plane and around a frontal axis
 - B. Body action during an ice skating spin takes place in the transverse plane and around a longitudinal axis
 - C. Body action during an ice skating spin takes place in the frontal plane and around a sagittal axis
 - D. Body action during an ice skating spin takes place in the sagittal plane and around a transverse axis

B

15. Which one of the following is correct about the elbow joint?
- A. Flexion occurs when the triceps contracts
 - B. Extension occurs when the triceps contracts
 - C. Flexion occurs when the biceps relaxes
 - D. Extension occurs when the biceps contracts

B

16. Which one of the following is correct about the shoulder joint?
- A. Flexion occurs when the latissimus dorsi contracts
 - B. Extension occurs when the deltoid relaxes
 - C. Flexion occurs when the deltoids contracts
 - D. Extension occurs when the latissimus dorsi relaxes

C

17. Which one of the following is correct about the shoulder joint?
- A. Abduction occurs when the latissimus dorsi contracts
 - B. Adduction occurs when the deltoid relaxes
 - C. Abduction occurs when the deltoids contracts
 - D. Adduction occurs when the latissimus dorsi relaxes

C

18. Which one of the following is correct about the knee joint?
- A. Flexion occurs when the hamstrings contract
 - B. Extension occurs when the quadriceps relax
 - C. Flexion occurs when the quadriceps contract
 - D. Extension occurs when the gluteals contract

A

19. Which one of the following is correct about the hip joint?
- A. Flexion occurs when the hip flexors contract
 - B. Extension occurs when the hamstrings relax
 - C. Flexion occurs when the hamstrings contract
 - D. Extension occurs when the hip flexors relax

A

20. Which one of the following is correct about the ankle joint?

- A. Dorsiflexion occurs when the gastrocnemius contracts
- B. Plantar flexion occurs when the gastrocnemius relaxes
- C. Dorsiflexion occurs when the tibialis anterior contracts
- D. Plantar flexion occurs when the quadriceps relax

C

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3 Physical Training

1. Which one of the following is the correct definition of health?
 - A. A state of freedom from disease
 - B. A state of well-being that includes the absence of disease
 - C. A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity
 - D. A state of physical, mental and social well-being

C

2. Which one of the following is the correct definition of fitness?
 - A. The ability to deal with everyday things
 - B. The ability to cope with the demands of the environment
 - C. The ability to perform exercise without stress
 - D. The ability to manage the demands of your sport

B

3. Which one of the following statements concerning the relationship between fitness and health is correct?
 - A. Increasing your fitness will also increase your health
 - B. You need good health in order to be fit
 - C. Being unhealthy does not necessarily mean being unfit
 - D. Health and fitness go hand in hand

C

4. Which one of the following fitness components is defined as the ability to change direction quickly?
 - A. Speed
 - B. Agility
 - C. Balance
 - D. Co-ordination

B

5. Which one of the following is the correct definition of agility?
 - A. The ability to control movements with directional changes
 - B. The ability to change direction with control
 - C. The ability to quickly change direction
 - D. The ability to change direction quickly with control

D

6. In which one of the following activities is agility an important fitness component?
 - A. 100-metre sprint
 - B. Springboard diving
 - C. Long jumping
 - D. Rowing

B

7. Which one of the following fitness components is defined as the ability to maintain the centre of mass over the base of support?
- A. Flexibility
 - B. Agility
 - C. Balance
 - D. Co-ordination

C

8. Which one of the following is the correct definition of balance?
- A. The ability to keep your mass stable
 - B. The ability to keep your base of support in the centre of your balance
 - C. The ability to maintain your base of support table
 - D. The ability to maintain the centre of mass over the base of support

D

9. In which one of the following activities is balance an important fitness component?
- A. 100-metre sprint
 - B. Springboard diving
 - C. Gymnastics beam routine
 - D. Rowing

C

10. Which one of the following fitness components is defined as the ability of the heart and lungs to supply oxygen to the working muscles?
- A. Flexibility
 - B. Cardio-vascular endurance
 - C. Balance
 - D. Co-ordination

B

11. Which one of the following is the correct definition of cardio-vascular endurance?
- A. The ability of the heart and lungs to supply oxygen to the working muscles
 - B. The ability of the heart and blood to supply oxygen to the working muscles
 - C. The ability of the blood to deliver oxygen to the working muscles
 - D. The ability of the lungs, heart and blood to deliver oxygen to the working muscles

A

12. In which one of the following activities is cardio-vascular endurance an important fitness component?
- A. 100-metre sprint
 - B. Springboard diving
 - C. Gymnastics beam routine
 - D. Rowing

D

13. Which one of the following fitness components is defined as the ability to use different (two or more) parts of the body together smoothly and efficiently?
- A. Flexibility
 - B. Reaction time
 - C. Balance
 - D. Co-ordination

D

14. Which one of the following is the correct definition of co-ordination?
- A. The ability to catch and hit balls efficiently
 - B. The ability to use the arms and legs to move efficiently
 - C. The ability to use different parts of the body together smoothly and efficiently
 - D. The ability to move easily and quickly into positions

C

15. In which one of the following activities is co-ordination an important fitness component?
- A. Goalkeeping
 - B. Springboard diving
 - C. Gymnastics beam routine
 - D. Rowing

C

16. Which one of the following fitness components is defined as the range of movement possible at a joint?
- A. Flexibility
 - B. Reaction time
 - C. Balance
 - D. Co-ordination

A

17. In which one of the following activities is flexibility an important fitness component?
- A. Goalkeeping
 - B. Springboard diving
 - C. Gymnastics beam routine
 - D. Rowing

C

18. Which one of the following fitness components is defined as the ability of a muscle to undergo repeated contractions avoiding fatigue?
- A. Flexibility
 - B. Muscular endurance
 - C. Balance
 - D. Co-ordination

B

19. Which one of the following is the correct definition of muscular endurance?
- A. The ability of a group of muscles to contract efficiently
 - B. The ability of a muscle group to delay fatigue
 - C. The ability of a group of muscles to contract repeatedly
 - D. The ability of a muscle to undergo repeated contractions and avoid fatigue.

C

20. In which one of the following activities is muscular endurance an important fitness component?

- A. Goalkeeping
- B. Springboard diving
- C. Gymnastics beam routine
- D. Rowing

D

21. Which one of the following fitness components is defined as the product of strength and speed?

- A. Flexibility
- B. Muscular strength
- C. Power
- D. Co-ordination

C

22. Which one of the following is the correct definition of power?

- A. The product of strength and speed
- B. The sum of strength and speed
- C. The product of stamina and speed
- D. The sum of strength and suppleness

A

23. In which one of the following activities is power NOT an important fitness component?

- A. Rugby scrum
- B. Springboard diving
- C. Gymnastics balance
- D. Rowing

C

24. Which one of the following fitness components is defined as the time taken to initiate a response to a stimulus?

- A. Flexibility
- B. Reaction time
- C. Power
- D. Co-ordination

B

25. Which one of the following is the correct definition of reaction time?
- A. The time taken to complete a response
 - B. The time taken to initiate a stimulus
 - C. The time taken to react
 - D. The time taken to initiate a response to a stimulus

D

26. In which one of the following activities is reaction time an important fitness component?
- A. Rugby scrum
 - B. Springboard diving
 - C. Basketball shooting
 - D. Rowing

C

27. Which one of the following fitness components is defined as the maximum rate at which an individual is able to perform a movement?
- A. Speed
 - B. Reaction time
 - C. Power
 - D. Co-ordination

A

28. Which one of the following is the correct definition of speed?
- A. The maximum rate at which an individual is able to perform a movement
 - B. The maximum time it takes to complete a movement
 - C. The maximum rate at which a movement is made
 - D. The maximum movement that can be made in a certain time

A

29. In which one of the following activities is speed an important fitness component?
- A. Rugby scrum
 - B. Marathon running
 - C. Table tennis
 - D. Rowing

C

30. Which one of the following fitness components is defined as the ability to overcome a resistance?
- A. Speed
 - B. Reaction time
 - C. Power
 - D. Strength

D

31. Which one of the following is the correct definition of strength?

- A. The ability to overcome an opponent
- B. The ability to resist an opponent
- C. The ability to oppose a resistance
- D. The ability to overcome a resistance

D

32. In which one of the following activities is strength an important fitness component?

- A. Rugby scrum
- B. Marathon running
- C. Table tennis
- D. Gymnastics routine

A

33. Which one of the following is another name for explosive strength?

- A. Speed
- B. Power
- C. Muscle
- D. Dynamic

B

34. Which one of the following defines static strength?

- A. Using strength when moving
- B. Using strength when balanced
- C. Using strength repeatedly
- D. Using strength without moving

D

35. Which one of the following is NOT a reason why people undertake fitness tests?

- A. To identify strengths and weaknesses
- B. To measure fitness
- C. To see improvements in fitness
- D. To change the training programme

D

36. Which one of the following is NOT a reason why people undertake fitness tests?

- A. To compare to others
- B. To motivate people
- C. To make people repeat tests
- D. To improve fitness

C

37. Which one of the following statements is NOT correct about the Illinois agility test?

- A. The performer starts face down on the floor
- B. The test involves running round the cones
- C. It is a sub-maximal test
- D. It is timed in seconds

B

38. Which one of the following is NOT correct about the stork balance test?

- A. You start balanced on one leg
- B. It is measured in seconds
- C. You balance on your toes
- D. You use your hands for balance

D

39. Which one of the following is NOT correct about the multistage fitness test?

- A. You run quicker every shuttle
- B. Each shuttle is 20 metres long
- C. It is a maximal test
- D. It measures cardio-vascular fitness

A

40. Which one of the following is NOT correct about the Anderson ball-catch test?

- A. It is a test for co-ordination
- B. It lasts 60 seconds
- C. It involves throwing a ball against a wall
- D. You can only use one hand

B

41. Which one of the following is NOT correct about the sit and reach test?

- A. You sit on the floor with your feet against the box
- B. You stretch as far as possible
- C. The further you stretch the greater your flexibility
- D. It measures flexibility in your arms

D

42. Which one of the following is NOT correct about the abdominal curl conditioning test?

- A. You do sit ups in time to the beep
- B. A partner holds your feet
- C. It measures muscular strength
- D. The test is maximal

C

43. Which one of the following is NOT correct about the vertical jump test?

- A. It measures explosive strength
- B. You push the slider up as high as you can stretch
- C. You jump as high as you can
- D. The height you jump measures your power

D

44. Which one of the following is NOT correct about the ruler drop test?

- A. The further the ruler drops the better your score
- B. Your partner drops the ruler on your signal
- C. It measures reaction time
- D. The equipment needed is simply a metre ruler

A

45. Which one of the following is correct about the one rep max test?

- A. It involves a standard weight-lifting exercise
- B. It measures muscular endurance
- C. You are allowed three attempts at each weight
- D. The result is the weight you cannot lift

A

46. Which one of the following is NOT correct about the 30-metre sprint test?

- A. It measures speed
- B. You use a running start
- C. You should complete it in under 4 seconds
- D. You are allowed three attempts

C

47. Which one of the following tests would you use to measure reaction time?

- A. A stork balance
- B. A ball-catch test
- C. A ruler drop test
- D. A 30 metre sprint

C



48. Which one of the following tests would you use to measure power?

- A. A curl conditioning test
- B. A multistage fitness test
- C. A one rep max test
- D. A vertical jump test

D

49. Which one of the following best describes the fitness components needed by a goalkeeper?

- A. Stamina, agility and strength
- B. Agility, balance and speed
- C. Reaction time, power and strength
- D. Balance, co-ordination and agility

D

50. Which one of the following best describes the fitness components needed by a trampolinist?

- A. Stamina, agility and strength
- B. Agility, balance and speed
- C. Reaction time, power and strength
- D. Flexibility, co-ordination and agility

D

51. Which one of the following best describes the fitness components needed by a discus thrower?

- A. Stamina, agility and strength
- B. Agility, balance and speed
- C. Reaction time, power and strength
- D. Flexibility, co-ordination and stamina

B

52. Which one of the following identifies some of the main principles of training?

- A. Stamina, overload and reversibility
- B. Overload, reversibility and tedium
- C. Specific, frequency and progression
- D. Frequency, intensity and type

B

53. Which one of the following correctly explains the S in the principles of training?

- A. Specific to the activity and the performer
- B. Suitable to the performer and the season
- C. Safe for the performer
- D. Special for the activity concerned

A

54. Which one of the following correctly explains the principle of overload?

- A. Working so hard it causes DOMS
- B. Working harder than normal
- C. Working the same as normal
- D. Working with heavy weights

B

55. Which one of the following correctly explains the principle of reversibility?

- A. Doing the training exercises in reverse order
- B. Reserving a time and place for training
- C. Losing fitness because of not training
- D. Resting in order to allow training to have an effect

C

56. Which one of the following correctly explains how to overload?

- A. Increase frequency, intensity and time
- B. Increase fitness, intensity and type
- C. Increase frequency, interval and time
- D. Increase fitness, interval and type

A

57. Which one of the following types of training would be best for a road cyclist?

- A. Circuit training
- B. Plyometrics
- C. Continuous training
- D. Fartlek training

C

58. Which one of the following types of training would be best for a gymnast?

- A. Circuit training
- B. Weight training
- C. Continuous training
- D. Fartlek training

A

59. Which one of the following types of training would be best for a shot putter?

- A. Circuit training
- B. Weight training
- C. Continuous training
- D. Fartlek training

B

60. Which one of the following types of training would be best for a 400-metre runner?

- A. Circuit training
- B. Weight training
- C. Plyometrics
- D. Fartlek training

C

61. Which one of the following activities might benefit from a period of altitude training?

- A. Sprint cyclist
- B. Pole vaulter
- C. Long distance runner
- D. Table tennis player

C

62. Which one of the following usually results from training at altitude?

- A. Increased numbers of white blood cells
- B. Increased numbers of red blood cells
- C. Reduced numbers of white blood cells
- D. Reduced numbers of red blood cells

B

63. Which one of the following is NOT a possible reason why altitude training is not always successful?

- A. Fitness may be lost
- B. Performers may get sick
- C. It is often very cold
- D. The effects wear off very quickly

C

64. Which one of the following is NOT a benefit of a warm up?

- A. Increases blood flow
- B. Increases psychological preparation
- C. Increases fitness
- D. Increases range of movement

C

65. Which one of the following correctly describes the sequence of activities that should be included in a cool down?

- A. Lying down to stop blood flowing too quickly
- B. Stretching, jumping and running exercises
- C. Exercises of gradually increasing intensity
- D. Jogging to reduce heart rate and static stretching

D

