



The EverLearner

National Mock Exams 2024

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Mark Scheme AQA A-level PE – Paper 2

Please read before distributing to students.

Purpose of this document

This document and the associated question paper are based on the data analysis performed by The EverLearner Ltd and published within the 2024 infographics. Please, note the following:

- We believe this mark scheme has a very strong association with previous AQA A-level PE Paper 2 exams in relation to command terms, skills, AO distribution, extended writing requirements and topics.
- However, this is categorically NOT a mark scheme for a predicted paper. No one can accurately predict an exam paper and we make no claim to this end.
- It is vital that you only use this document internally in your school/college. Publishing the document online or sharing it in any other way is strictly prohibited as this will undermine the potentially educational experiences of students in other schools/colleges.
- Finally, please check the publication dates of the model answers for this paper as well as the associated revision sessions in April/May.

This mark scheme contains:

- Copy of each question for reference
- Marking guidance where appropriate
- Marking points containing alternative acceptable responses plus relevant assessment objective

How should schools use this mark scheme?

The mark scheme has been constructed specifically for the exam paper used in The EverLearner's National Mock Exams from 2024. The model answers will be available in early April and many of these questions will be discussed in the live revision show provided by James Simms (Thursday 30th of May, 16:30-18:00 on [youtube.com/TheEverLearner](https://www.youtube.com/TheEverLearner)).

All questions/mark schemes are available on ExamSimulator. Please note, there are hundreds of additional questions and mark schemes on ExamSimulator covering the IGCSE PE topics and skills. Within the platform, the teacher is assisted with the marking and full diagnostic feedback is also provided. ExamSimulator is a premium resource available via TheEverLearner.com.

I hope this helps both students and teachers in their exam preparations.

James Simms



Subject	Physical Education
Course	AQA Linear GCE PE Paper 2: Factors affecting optimal performance in physical activity and sport
Time allowed	120 minutes

Title	AQA A-level PE Paper 2 - National Mock Exam 2024
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Guidance	<ul style="list-style-type: none">• This paper is marked out of 105 marks.• You have 120 minutes (plus additional time for those who have Exam Access Arrangements).• Answer all questions.• A calculator is permitted for this exam.• This paper contains three 8-mark and three 15-mark questions.• Good luck.
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Total marks	105
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SECTION A: Exercise Physiology and Biomechanical Movement

1. "Rest days should be included to allow the body to repair and adapt to the demands of training."

Which principle of training is this defining?

Marking guidance

Please note the definitions have been taken from the new and updated AQA subject-specific vocabulary.

Marking points (**maximum 1**)

(1) [AO 1] Option D/D/Recovery

2. If a 400m sprinter decelerates in the last 50m of the race, which of the force-time graphs will represent this best?

Marking points (**maximum 1**)

(1) [AO 2] Option C/C/Graph C

3. Identify **three** types of chronic injuries that may occur in sport.

Marking points (**maximum 3**)

(1) [AO 1] Stress fracture

(2) [AO 1] Shin splints/Medial tibial stress syndrome/Medial tibial stress

(3) [AO 1] Tendinosis/Achilles tendinosis/Golfer's elbow

**4. Define Newton's first and second laws of motion.
Give a sporting example of each.**

Marking guidance

Accept other sporting examples.

Examples must relate directly to the definition of N1 and N2.

Marking points (maximum 4)

(1) [AO 1] Body will remain in a state of rest or uniform motion until a force acts upon it/Body will remain in a state of uniform motion until compelled to change by an external force/Motion is conserved until an external force acts

(2) [AO 2] Sprinter will remain still on the starting block/Sprinter will accelerate forward when the block applies a reaction force to the sprinter/Badminton player will remain still in the ready position

(3) [AO 1] Acceleration is directly proportional to the magnitude of the force produced and is governed by the direction of the force applied/Body will accelerate proportionally to the force acting on it and in the direction of that force/Force = Mass x Acceleration

(4) [AO 2] Tennis ball accelerates more if the serve is hit with more force/The harder the golf ball is struck, the greater the rate of acceleration away from the club/Cricket ball decelerates faster the more force the hands apply to the ball during a catch

5. Evaluate the use of hydrotherapy for an athlete with a muscle strain.

Marking guidance

Sub max two marks for the **advantages** of hydrotherapy and sub max two marks for the **disadvantages**.

As the command is "Evaluate", the marks can only be awarded for AO3, so it is important each marking point includes linked **judgement** of the impact hydrotherapy has, specifically athletes with a muscle strain.

Marking points (maximum 3)

- (1) [AO 3] Improves blood circulation so fresh oxygenated blood can head to the site of a muscle strain to relieve pain
- (2) [AO 3] Buoyancy of the water helps support body weight so a muscle is able to generate force under less load, leading to the injured area being strengthened
- (3) [AO 3] Rehabilitation process is faster, as more exercise can be completed in water than on land
- (4) [AO 3] Relaxing and can support an athlete with the mental toughness of a muscle injury
- (5) [AO 3] Contain underwater treadmills so a muscle strain can be exercised safely
- (6) [AO 3] However, the warm water can lead an athlete to experience nausea
- (7) [AO 3] Heat does not reduce swelling and inflammation in the same way cold therapy does
- (8) [AO 3] Not all athletes have access and rehabilitation is, therefore, longer
- (9) [AO 3] Athletes can feel lonely exercising in a pool, causing a reduction in confidence and motivation

6. Analyse the factors affecting stability when performing a tackle in rugby.

Marking guidance

[8 Mark Level Descriptors](#)



Marking points (**maximum 8**)

- (1) [AO 1] Height of centre of mass
- (2) [AO 2] Different players have a lower or higher CoM when standing/Backs have a lower CoM/Forwards tend to have a higher CoM
- (3) [AO 3] The higher the CoM when tackling, the less stable/Flex knees and get low to increase stability/Upright tackling is less effective
- (4) [AO 3] Taller rugby players need to work harder to get lower and make effective tackles
- (5) [AO 3] Conditioning of leg muscles supports stability at the base of the tackle
- (6) [AO 1] Mass of the player/Mass/Weight
- (7) [AO 2] Rugby players tend to have a high mass/Weigh more/Heavy athletes
- (8) [AO 3] If the player has more mass, they will be more stable in the tackle/More mass promotes stability
- (9) [AO 3] Player learns to distribute mass in the best way for an effective tackle
- (10) [AO 1] Area of base of support/Size of base
- (11) [AO 2] Player uses wide base in the tackle/Feet more than hip-width apart/One foot in front of another
- (12) [AO 3] Larger base leads to a greater stability when making contact with the opponent
- (13) [AO 3] Increased points of contact with the ground leads to staying on feet
- (14) [AO 3] Player will not be pushed to the ground/Lose technique, which can lead to a penalty
- (15) [AO 1] Line of gravity/Position of the centre of mass above the base/Centre of mass in relation to the base
- (16) [AO 2] Player positions the centre of mass in the middle of the tackle to promote stability
- (17) [AO 3] Centre of mass is above the base to ensure they are balanced in the contact
- (18) [AO 3] Balance in the contact supports the other players also heading into the contact
- (19) [AO 3] Reduction in neck and back injuries if line of gravity is optimised

7. Analyse the role of the following food classes **during** exercise:

Protein

Fibre

Vitamin B-12

Iron

Marking guidance

[15-Mark Level Descriptors](#)



Marking points (maximum 15)

- (1) [AO 1] Protein is a combination of amino acids
- (2) [AO 1] Found in meat, fish, eggs and nuts
- (3) [AO 2] Protein is important for growth and repair/Growth and repair
- (4) [AO 2] Protein is crucial for the adaptation process/Needed for adaptations to occur
- (5) [AO 2] Protein required for building more haemoglobin/Making more red blood cells/Required for erythropoiesis
- (6) [AO 3] Therefore, during exercise, it is vital to support oxygen transportation to muscles during aerobic respiration
- (7) [AO 3] Minor energy source during extreme endurance exercise
- (8) [AO 3] Muscle filaments such as actin and myosin are proteins and required for muscle contraction
- (9) [AO 1] Fibre leads to healthy function of the large intestine/Aids digestion
- (10) [AO 1] Sources of fibre include wholemeal bread and pasta
- (11) [AO 2] Dietary fibre aids digestion/Prevents constipation
- (12) [AO 3] During exercise, it can slow down the time it takes to break down food, leading to a slower and more sustained release of energy
- (13) [AO 3] No digestive discomfort/Athlete feels at ease when exercising
- (14) [AO 3] Beneficial at the start of events, as athletes feel lighter
- (15) [AO 1] Vitamin B-12 also known as folate/Folic acid
- (16) [AO 1] Found in sources of red meat, fish and dairy products
- (17) [AO 2] Helps make red blood cells
- (18) [AO 2] Keeps the nervous system healthy
- (19) [AO 2] Releases energy from food

(20) [AO 3] Nervous system is vital in initiating muscle contraction/Nerve impulses are sent to working muscles/Action potential required in the motor neuron to recruit motor units

(21) [AO 1] Iron helps with the formation of haemoglobin

(22) [AO 2] Vital for oxygen transportation

(23) [AO 3] Oxygen supply needed during exercise to prevent waste products linked with anaerobic respiration/Lower carbonic acid/Less lactic acid

(24) [AO 3] Prevents anaemia, which can make an athlete feel lethargic and not exercise at their normal intensity

SECTION B: Sport Psychology

8. Which of the following is the correct description of a stressor?

Marking points (maximum 1)

(1) [AO 1] Option B/B/Cause of stress

9. "The rock-climbing coach is giving direct instructions of which route the individual should climb."

Which style of leadership is being described?

Marking points (maximum 1)

(1) [AO 2] Option A/A/Autocratic leadership

10. Goals set for athletes need to be specific and measurable. Describe **four** other elements of the SMARTER principle.

Marking guidance

Accept any four from the marking points. The elements do not need to be presented in the order of the SMARTER principle but do require a description for the mark. Do not accept named parts of SMARTER as sufficient.

Specific and measurable can not be credited, as they are already stated in the question.

Marking points (maximum 4)

(1) [AO 1] Achievable - goals need to be within scope of the performer's effort levels/Goals match the effort of the performer/Goals are able to be achieved

(2) [AO 1] Realistic - goals need to be set within the performer's ability levels while still providing enough challenge to be motivating/Match performance ability/Challenging enough

(3) [AO 1] Time-bound - a goal deadline to be achieved should be clearly defined/Deadline defined clearly/Performer knows when the goal is achieved by

(4) [AO 1] Evaluate - following a deadline, the performer should consider whether the goal was achieved or not and identify the reasons for success or failure/Was the goal achieved?/Reasons for success and failure

(5) [AO 1] Re-do - process should be repeatable with a new goal focussing on an identified weakness or with increased level of challenge to maintain progress/Repeat the process/New goal to continue progress

11. Give **three** different situations from a match when a hockey player might display competitive state anxiety.

Marking points (**maximum 3**)

(1) [AO 2] A player taking a penalty stroke/Penalty stroke

(2) [AO 2] A goalkeeper being faced with a penalty stroke

(3) [AO 2] Penalty shuffle at the game as it has ended in a draw/Penalty shuffles

(4) [AO 2] A player being given a yellow or green card and the number of players on the pitch is reduced/Fewer players due to yellow or green card

(5) [AO 2] Reduced numbers when a player is sent off

(6) [AO 2] Attacking a penalty corner at the end of a game/Defending a penalty corner at the end of the game/Injecting a penalty corner

(7) [AO 2] A derby game/Start of an important match/Knockout game

12. Evaluate the impact of evaluation apprehension on performance in hockey.

Marking guidance

Sub max two marks for the **advantages** of evaluation apprehension and sub max two marks for the **disadvantages**.

As the command is "Evaluate", the marks can only be awarded for AO3, so it is important each marking point includes linked **judgement** of the impact evaluation apprehension has, specifically on hockey players.

Marking points (maximum 3)

- (1) [AO 3] Being watched for talent identification purposes may lead to an increased motivation to perform well
- (2) [AO 3] Being watched by family members increases work rate in an attempt to make them proud
- (3) [AO 3] Fear of being judged could lead to a better prematch routine/Make sure mental rehearsal is used more before a game
- (4) [AO 3] Arousal could be increased to an optimal level, leading to a better application of the team tactics
- (5) [AO 3] However, it can heighten anxiety to a point of inhibition and performance is significantly reduced
- (6) [AO 3] Leads to overarousal, which inhibits information processing and the player makes mistakes when passing the ball
- (7) [AO 3] S-R bond is weakened and the retrieval of motor programmes is delayed
- (8) [AO 3] A scout observing may cause a drop in confidence and lead to a substitution
- (9) [AO 3] Leads to a increase in pressure and the player opts to not participate in the game

13. The image shows the three strategies a rugby coach is using to control the aggression of her team.

Evaluate the listed strategies for controlling aggression in rugby.

Refer to the positive impact technology has in support of each strategy.

Marking guidance

[8 Mark Level Descriptors](#)



Marking points (**maximum 8**)

- (1) [AO 1] Non-aggressive role models can be highlighted on technology
- (2) [AO 2] For example, a non-aggressive act shown on a reel on social media platforms
- (3) [AO 2] Coaches may use video analysis software to highlight when an individual has avoided aggressive behaviour/Positive reaction by individuals is shared by coaches through video-based technology/Positive reaction to a tackle
- (4) [AO 2] An advantage of this is peers are able to learn from each other/Social learning takes place and players try to replicate the actions of the their role model
- (5) [AO 3] Individuals are more focussed on other areas of rugby/Increased concentration/Improved levels of anxiety and arousal
- (6) [AO 3] Coach is able to focus on developing rugby technique and tactics rather than punishing aggressive behaviour
- (7) [AO 3] However, rugby is a contact sport and it is not always clear to see the difference between aggression and assertion
- (8) [AO 3] Not all clubs have the technology to highlight the non-aggressive behaviour and have to rely on pointing it out when it occurs
- (9) [AO 3] A coach may not believe on dedicating time to prevent aggression
- (10) [AO 1] Fair-play awards is a method to channel aggression
- (11) [AO 1] Awards can be given in training, games or annually
- (12) [AO 2] For example, Player of the Game can be attributed to behaviour and assertion/Player with the least amount of sin bins can be highlighted
- (13) [AO 2] Match analysis technology such as apps can be utilised well to collate number of successful and unsuccessful tackles/Sin bin incidents/Penalties given away
- (14) [AO 2] Player discipline can be tracked for each game and the entire season through rugby-specific statistic technology

- (15) [AO 3] Advantages are that players are aware all aspects of their game are being scrutinised
- (16) [AO 3] Players have a goal to aim for that is related to assertive behaviour and level of discipline
- (17) [AO 3] Players support each other to work towards fair-play awards/Players lead each other and try and lead by example
- (18) [AO 3] However, fair-play awards may not be given the importance they deserve and players are dismissive of the purpose
- (19) [AO 3] Aggressive cues may still lead to an aggressive act as the awards do not act as a deterrent
- (20) [AO 3] Frustration is common to a rugby game and may still lead to aggression
- (21) [AO 1] Punishment can be applied by a coach or the club
- (22) [AO 2] For example, a coach can substitute a player if an aggressive act has occurred/Player is not selected for a game
- (23) [AO 2] Club may fine the player/Player ban/Contractual change
- (24) [AO 2] Video playback provides evidence to the player if a punishment has been applied
- (25) [AO 2] TMO is used to cite any aggression missed by the on-field referee
- (26) [AO 3] An advantage is that the punishment acts as a deterrent to other players
- (27) [AO 3] Players are clear on what is expected and the outcome if they break rules of the game
- (28) [AO 3] Players play with more assertion/Stimulus-response bond is weakened
- (29) [AO 3] Players have a functional role on other players at grassroots level of the game
- (30) [AO 3] However, punishment could lead to further frustration/Punishment may not have a cathartic effect/Player could continue to be aggressive in reaction to the punishment
- (31) [AO 3] Player disrupts the changing room, having a detrimental effect on the whole team performance

14. Some researchers claim that sporting success and personality are linked. Analyse the interactionist perspective of personality in sport.

Marking guidance

[15-Mark Level Descriptors](#)



Marking points (**maximum 15**)

- (1) [AO 1] Interactionist perspective are theories which combine trait and social learning to predict how a person will act in a specific situation/Mixture of personality traits, the situation, trait and social learning theory/All theories are mixed together
- (2) [AO 1] Hollander model suggests three components: psychological core, typical response and role-related behaviour
- (3) [AO 2] In sport, the psychological core are the stable characteristics or traits of the performer, coach or official
- (4) [AO 2] Typical response is the usual or expected behaviour in a given situation
- (5) [AO 2] A coach is able to work with the athlete to change their role-specific behaviour/Modify behaviour when situation demands change
- (6) [AO 3] Therefore, a coach is able to teach an athlete to react in specific way to be able to improve sporting performance
- (7) [AO 3] Coach can identify a usual behaviour and use strategies to change it if required
- (8) [AO 3] If the athlete is nervous in front of a crowd, the coach can suggest strategies and how to cope, causing the typical response to be altered over time
- (9) [AO 3] Sporting situations can be created to cause a change in specific behaviour/Allow the athlete to experience a scenario to cause a change in behaviour/Manipulate situations to support behavioural change
- (10) [AO 3] Coach is able to identify a situation to avoid aspects of personality being displayed/Offer support and guidance in a known situation where personality can impact performance/Is able to predict any potential challenging situations
- (11) [AO 1] Lewin's formula of behaviour is a function of personality and the environment/ $B = F(P \times E)$
- (12) [AO 2] The behaviour of a team member is dependent on their personality and the competitive situations they are in/Coaches are aware of personality traits of each member and how they respond to competitive situations/Team members have different personalities

(13) [AO 2] Personality is stable but competitive situations are unstable and may require different behavioural responses/Team may not be able to adapt to varying situations/Adaptability of the team is crucial, as competitive situations are unstable

(14) [AO 3] A coach is able to predict an unacceptable response and move positions within the team/Can prevent unacceptable behaviour through a substitution/Remove players from unfavourable situations

(15) [AO 3] Core values of the team may be difficult to alter/Behaviour exerted in a competitive situation is determined by the core values of the team/Stable team values may effect the performance positively or negatively

(16) [AO 3] Coach is able to use the behaviour response on some team members to influence others/Coach knows which players require support in certain situations/Coach has a full understanding of the traits within the team

(17) [AO 3] Coach can deploy methods so team members are aware of their personality profile/Team members understanding their personality profile will support them having to change and alter/Coaches can suggest coping strategies by allowing members to understand the interactions within this perspective

SECTION C: Sport and Society and Technology in Sport

15. Which of the following is a feature of the Gold Event Series?

Marking points (maximum 1)

(1) [AO 1] Option C/C/Attracting world championships to the UK

16. Look at the definition in the image provided. Which of the options is being defined?

Marking points (maximum 1)

(1) [AO 1] Option C/C/Amateurism

17. State **three** characteristics of physical recreation.

Marking points (maximum 3)

(1) [AO 1] Recreation has modified rules/Rules have been changed/Rules are different to official sports

(2) [AO 1] Recreation is often self-officiated/No external officials are usually used/Official by the people participating

(3) [AO 1] Recreation is done for intrinsic rewards/Recreation is done for enjoyment/Recreation for stress relief

(4) [AO 1] Done voluntarily/Choice of the participant to be involved/Participation is optional

(5) [AO 1] Involves adults at the participation level/Adults in the participation level of sporting development continuum/Adults usually at the participation level

(6) [AO 1] Flexible in nature, so rules and timings are adjusted/No set rules for the entire match/Activities can constantly be adjusted

18. Using **three** different examples, explain how negative deviance is displayed in sport.

Marking guidance

The examples given in the marking points act merely as guidance and are **not** exhaustive. However, in order to gain the AO2 marks, the learner needs to use each example **and** link it clearly to how it demonstrates negative deviance.

Marking points (maximum 3)

- (1) [AO 2] Cyclist taking EPO to improve performance, which is an illegal performance enhancement
- (2) [AO 2] Deliberately handballing in football to stop a goal, which is against the laws of the game
- (3) [AO 2] Match-fixing in cricket/Accepting a bribe to lose a match, which is illegal
- (4) [AO 2] Diving to win a penalty, which is against the unwritten rules of the game
- (5) [AO 2] Deliberately harming an opponent in rugby, which is outside the accepted rules of the game

19. Other than the Whereabouts system, state **one** strategy that the World Anti-Doping Agency (WADA) uses to eliminate PEDs in sport.

Marking points (**maximum 1**)

(1) [AO 1] Educate the athletes about the implications of taking drugs/Educate coaches about the laws surrounding supplements/Education programmes to promote a drug-free culture

(2) [AO 1] Change the culture of the sport to put pressure on doping athletes/Pressure players and coaches to speak out against doping/Change the identity of the sport

(3) [AO 1] More rigorous punishments given to athletes/Longer bans for athletes caught doping/Stronger sanctions for athletes caught doping

(4) [AO 1] Name and shame negative role models/Name and shame

(5) [AO 1] Lose funding/Lose sponsorship deals

(6) [AO 1] Drug detection and enforcement to work together/Organisations to have a coordinated approach/Structured detection and enforcement teams

(7) [AO 1] Increased technology and research into drug detection/Improved technology/More advanced research

20. Evaluate the effectiveness of WADA's Whereabouts system for eliminating performance-enhancing drugs in sport.

Marking guidance

Sub max two marks for the **advantages** of the Whereabouts system and sub max two marks for the **disadvantages**.

As the command is "Evaluate", the marks can only be awarded for AO3, so it is important each marking point includes linked **judgement** of the impact of the Whereabouts system to eliminate PEDs in sport.

Marking points (maximum 3)

- (1) [AO 3] Athletes supply their whereabouts, so that out-of-competition testing takes place without notice
- (2) [AO 3] Reduces the temptation of athletes to use performance-enhancing drugs out of competition
- (3) [AO 3] Drug cheats are found sooner, so bans and fines can be applied immediately
- (4) [AO 3] Reduces media focus on PEDs, as it is clear that random testing is taking place/Increases public confidence
- (5) [AO 3] Different sports have a greater confidence in a unified system
- (6) [AO 3] Increased employment opportunities of drug-testing officials
- (7) [AO 3] However, funding of the system could be spent on grassroots sport
- (8) [AO 3] Technology such as gene doping may mean athletes can still mask their doping
- (9) [AO 3] Visit of a WADA official is intrusive to an athlete's private life
- (10) [AO 3] Difficult to obtain immediate access to athlete training abroad, leading to slow protocols

21. Analyse the impact of the following strategies for preventing spectator violence at football matches:

Banning alcohol sales

Fan segregation

Increased use of CCTV

Marking guidance

[8 Mark Level Descriptors](#)



Marking points (**maximum 8**)

- (1) [AO 2] No alcohol can be taken in seated area
- (2) [AO 2] No alcohol in stadia
- (3) [AO 2] Pubs requested to close nearer stadia
- (4) [AO 3] No alcohol leads to more positive behaviours
- (5) [AO 3] Decreased likelihood of fights between rival fans
- (6) [AO 3] Families feel safer to attend, changing the spectator atmosphere
- (7) [AO 3] Early kick-off ensures alcohol-fuelled behaviour is reduced/Less time outside the stadium to commit violent acts/
- (8) [AO 3] Less pressure on the police and stewards in the stadium
- (9) [AO 3] Reduce likelihood of abuse to the players on the pitch/Players can play freely without abuse/Not able to throw objects at players
- (10) [AO 2] Fan segregation is a clear division through ticket sales of the opposing fans
- (11) [AO 2] Fan segregation increased by a line of stewards
- (12) [AO 3] Provides a safe environment for younger spectators/Younger fans are free from harm/Younger fans are not subjected to listening to inappropriate language and behaviour
- (13) [AO 3] Fans are able to enjoy the game around individuals with the same allegiance
- (14) [AO 3] Segregation can lead to family zones and football can be promoted as family entertainment
- (15) [AO 3] Atmosphere is more civilised and free from hostile abuse
- (16) [AO 2] CCTV can be placed in several places within and out of the stadium
- (17) [AO 2] Monitored by the duty police
- (18) [AO 2] Technology of the CCTV cameras has increased
- (19) [AO 2] Viewing of incidents is very clear

- (20) [AO 3] Use of instant technology ensures the spectator is aware they can be cited at any time
- (21) [AO 3] Camera technology supports the police as it acts as a deterrent
- (22) [AO 3] Spectators will develop effective control strategies if they are aware the technology can cite the violence in a court of law
- (23) [AO 3] Citing can lead to spectator bans to combat the instigators of poor behaviour
- (24) [AO 3] Immediate technology, which can lead to individuals being ejected to prevent escalation
- (25) [AO 3] Quicker arrests by the police to reduce violence continuing outside the stadium

22. Evaluate the function of the following sports analytics processes: Monitoring fitness for performance

Skill and technique development

Refer to the use of foam rollers and massage as recovery methods to support the analytics process.

Marking guidance

[15-Mark Level Descriptors](#)



Marking points (**maximum 15**)

- (1) [AO 1] Foam roller is a self-massaging tool/Process of self-massage
- (2) [AO 2] Roller is applied to a target muscle area using athlete's body weight/Apply roller to target muscle group/Use body weight to apply resistance
- (3) [AO 2] Roller will release tension between the muscles and the fascia/Release tension in the muscles/Overcome muscle tightnes
- (4) [AO 1] Massage is completed by an external body applying pressure to the muscles using qualified and safe techniques
- (5) [AO 2] Increases blood flow to the area, delivering more oxygen and nutrients/More oxygen and nutrients to areas to speed up recovery
- (6) [AO 2] Removal of lactic acid from the area/Helps to speed up removal of lactic acid/More oxygen can help to buffer lactic acid
- (7) [AO 2] Releases tension in the muscle fibres/Stretches the muscle fibres, releasing tension/Reduces tightness in the muscle fibres
- (8) [AO 2] Helps to break down scar tissue/Breaks up scar tissue which reduces movement/Scar tissue can be broken up, helping movement
- (9) [AO 3] Both techniques used postexercise at a point when sports analytics are being processed to be then shared with athletes
- (10) [AO 1] Monitoring fitness is achieved through data collection
- (11) [AO 2] Heart-rate data/Training zones/Calories used
- (12) [AO 2] Athletes use wearable technology such as watches and chest devices
- (13) [AO 3] Data provides instant feedback for athletes to review the quality and intensity of their training
- (14) [AO 3] Objective data leads to positive dialogue between the coach and athlete

- (15) [AO 3] Goals are set and reviewed by monitoring fitness regularly
- (16) [AO 3] However, the quality of the device may determine the quality of the monitoring
- (17) [AO 3] Poor quality devices can lead to inaccurate analysis and athletes become demotivated
- (18) [AO 3] Data can also distract from technical and tactical review of performance
- (19) [AO 1] Skill and technique development is largely achieved through video analysis programmes
- (20) [AO 2] For example, Dartfish, HudL, VEO
- (21) [AO 2] All used to capture, create, analyse and share video content of isolated skills or full competitive performances
- (22) [AO 3] Slow motion provides an opportunity to unpick strengths and areas for development
- (23) [AO 3] Replay option allows skills to be compared to the perfect model
- (24) [AO 3] Coach can time stamp and share feedback with the performer so they can visualise and understand the coach's observations
- (25) [AO 3] Used to monitor progress and maintain high levels of motivation
- (26) [AO 1] Video can be used for biomechanical analysis
- (27) [AO 2] Specialised technology to measure joint angle, force production, body rotation
- (28) [AO 2] Provides key details for the movement and position of key points of the body
- (29) [AO 3] Athlete can make minor adjustments to the technique, leading to a greater gain when competing
- (30) [AO 3] However, the programmes are expensive and not all sports have access
- (31) [AO 3] Timely to set up and use, which can distract from fitness and skills-based training exercises
- (32) [AO 3] Often they require a paid subscription, which eliminates performers from lower socioeconomic backgrounds