GCE AS MARKING SCHEME

SUMMER 2024

AS
PHYSICAL EDUCATION - UNIT 1
2550U10-1

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

WJEC GCE AS PHYSICAL EDUCATION - UNIT 1

SUMMER 2024 MARK SCHEME

Question	Mark Scheme	AO1	AO2	AO3	Total
1. (a)	**A penalty kick in football uses large muscle groups** Identify which of the following terms is used to classify the penalty kick *Award one mark for:* D Gross	1			1
(b)	**Outline three reasons why a performer may reach a plateau during the learning process** 3 x 1 mark: Boredom Fatigue Inadequate coaching Focus Lack of drive / motivation (drive reduction) Reached peak performance Goals set too high /unrealistic Injury Overtraining / recovery	3			3

Question	Mark Scheme	AO1	AO2	AO3	Total
(c)	Explain how different types of transfer can help the learning of a new skill. *Award 1 mark for a basic explanation of how transfer helps learning a new skill.* *Award 2 marks for a detailed explanation of how different types of transfer help learning a new skill* *Award 3 marks for a developed explanation of how different types of transfer help learning a new skill* *Positive – one skill helps the learning of another.* <u>Bi-lateral</u> limb to limb e.g. being able to dribble using both sides of the body. <u>Proactive</u> when a skill being learned in the present will have future long term impact e.g. Learning to over arm throw as a child can influence the action of a tennis serve in the future. <u>Retroactive</u>. When a newly learned skill influences a previously learned skill. e.g. the acquisition of a successful tennis serve may influence the previously learned over arm throw used in cricket. Practice to performance. Positive transfer occurs with environmental conditions similar in both e.g. 3v2 in football. Stage to stage – motor skill development depends on building new skills on those previously learned e.g. standing to spinning throw in athletics. *Don't accept negative as question is about helping*		3		3

Question	Mark Scheme	AO1	AO2	AO3	Total
(d)	Analyse how guidance could be used in the cognitive stage of learning. *Indicative content:* Guidance: Visual - Learner can see accurate performance. Demonstrations can be repeated. With video 'slow motion', can help individuals learn skill accurately. Image/demo must be accurate. Helps to form a mental image of correct performance for beginners to follow. Bad habits can be formed if the demonstration technique shown is not correct, poor quality videos may de motivate performers etc. Verbal - Effective questioning/instructions by coaches/teachers can enhance learning and understanding. Effectively combined with visual guidance to paint a more accurate picture for learners. It is immediate/quick. Some verbal instructions are too long and complicated – beginners often have short attention spans (limited capacity to process information). Some movements cannot be accurately explained. Cognitive learners may struggle to use on own. Manual/Mechanical - Helps individuals to develop kinaesthetic awareness (the feel) of the motion. (e.g. physical support in handstand/ harness to learn a back somersault) Builds confidence in learners Reduces danger Can help avoid injury (tackle pads) Useful in early stages of learning when the teacher/coach can position limbs/body parts of the learner, e.g. correct hand position on ball when shooting in netball. Should not be overused as performers can become dependent/reliant on support. Can give learners an unrealistic 'feeling' of the motion, e.g. they do not take their full body weight and can therefore experience failure on removal of manual/mechanical guidance. (*See banding grid for allocation of marks)*			6	6
Totals		**4**	**3**	**6**	**13**

Band	AO3 (6 marks)
3	**5-6 marks** Excellent analysis of the use of guidance in the cognitive stage of learning. Guidance is analysed of each method evident. Relevant examples provided throughout. Response clearly expressed using accurate terminology. Well-structured with correct spelling, grammar and punctuation.
2	**3-4 marks** Good analysis of the use of guidance in the cognitive stage of learning. Analysis evident of at least two forms of guidance. Relevant examples provided. Adequately expressed with accurate terminology.
1	**1-2 marks** Limited analysis of the use of guidance in the cognitive stage of learning. Predominantly one type of guidance analysed.
0	No analysis of the use of guidance in the cognitive stage of learning. No marks for description of the types of guidance.

Question	Mark Scheme	AO1	AO2	AO3	Total
2. (a)	Explain why fast twitch muscle fibres are predominantly used by a 100m hurdler *1 mark for a basic explanation* *2 marks for a detailed explanation* *3 marks for a developed explanation* Allow more powerful/forceful/explosive contractions due to increased energy from ATP Large fibre size Increased energy stores production via lactate Anaerobic energy production High intensity energy/short duration Allow higher speed of contraction Increased enzyme activity for ATP production		3		3
(b)	Analyse how periodisation could be used to improve the performance of an athlete. *Indicative content:* Pre Season – Fitness, quantity over quality Competitive season - Maintenance and monitoring. Quality over quantity. Off Season - rest and recover Macrocycles - Training over a year period focusing on long term goals Meso cycles – 1 to 4-month training plan, medium term planning. Micro cycles - 1 to 3 weeks training plan linked to short term goals. <u>How it improves performance</u> Peaking & tapering - preparation for specific competitions / tournaments Benefits of periodisation and links to principles of training e.g. Can prevent overtraining and reversibility. Sport specific fitness can be developed and monitored, Allows variance and can prevent boredom Increases motivation with the use of goals, monitoring allows changes to intensity and duration to be made depending on progress. Allows performers to double peak for various competitions throughout the year.		2	4	6
Totals			**5**	**4**	**9**

Band	AO2 (2 marks)	AO3 (4marks)
3		**3-4 marks** Excellent analysis of periodisation and its importance when improving the performance of an athlete. All three cycles are referred to e.g. Meso, Macro, Micros. All three phases are referred to e.g. Pre-season, in season, off season. Response clearly expressed using accurate terminology. Well structured with correct spelling, grammar and punctuation.
2	**2 marks** Good/ relevant explanation of the structure of periodisation.	**2 marks** Good analysis of periodisation and its importance when developing a training programme for sporting performance. At least two cycles and phases are referred to. Adequately expressed with accurate terminology.
1	**1 mark** Limited explanation of the structure of periodisation.	**1 mark** Limited analysis of periodisation and its importance when developing a training programme for sporting performance Response maybe limited to only one cycle and phase of training.
0	No structure of the stages of periodisation.	No analysis of periodisation and why it's important when developing a training programme for your sporting performance.

Question	Mark Scheme	AO1	AO2	AO3	Total
3. (a)	Identify the area on the graph representing (4) EPOC – D Alactic recovery - B Oxygen Deficit – A Lactic recovery – C	4			4
(b)	**Describe four physiological effects of a warm up.** 4x1 mark Increases body temperature to increase the elasticity of the muscles / reduce risk of injury. Vasodilates blood vessels. Increase heart rate. Increase stroke volume. Increased cardiac output. Increase blood flow to working muscles. Enables muscles and tendons to be more supple, Increases oxygen delivery to the muscles, Speeds up the production and the release of energy into the muscle tissue. Increase muscle temperature increases enzyme activity. Increases synovial fluid in joints to aid. Increases the speed of impulses through nerves to the working muscles. *Note: can have cross overs with different effects.*	4			4

Question	Mark Scheme	AO1	AO2	AO3	Total
(c)	**Explain how a performer should hydrate before, during and after exercise** *Indicative content:* Hydration is maintaining the correct levels of water in the body thus allowing normal bodily functioning. If water levels drop then the body is said to be dehydrated which can have a dramatic, negative effect on sporting performance. An individual should remain hydrated at all times and not just before competition. The bigger the individual and the greater the amount of training, means the greater amount of water should be consumed. <u>Prior to exercise</u> Generally **between 4-7** litres of water should be consumed over a **24-**hour period. Just prior to exercise, particularly in events or sports taking place over an extended period of time it is important to be fully hydrated prior to competition. Depending on weather conditions, an individual should consume up **to 2 litres** of water. This amount of water should be consumed **over 2 to 3 hours** <u>During exercise</u> Amount of water consumed during exercise depends on climate conditions and the size of the individual. It is important to consume small amounts of fluids but drink them at regular intervals. A guide to hydration during exercise is to consume between **150-250 ml every 10-15** minutes or between ½ - 1 litre per hour of exercise. If exercising for longer than 90 minutes then the consumption of energy drinks can also be beneficial to replace lost carbohydrate/ glycogen stores and electrolytes, which are all essential for energy (ATP) production.	1	5		6

Question	Mark Scheme	AO1	AO2	AO3	Total
	After exercise, it is essential to rehydrate after exercise in order to aid the recovery process. For **every 1 KG of body weight** that is lost approximately 1 litre of water should be consumed over a period of hours rather than all at once. Types of drinks. **Hypotonic** – lower concentration of salt/sugar needed for quick loss of fluid through sweat. There is no boost of energy. **Isotonic** (most common all stages need this)– same concentration of salt/sugar but contains carbs to replace energy (longer events). **Hypertonic** – high concentration of salt/sugar needed for recovery to replenish glycogen.				
Totals		**9**	**5**	**0**	**14**

Band	AO1 (1 mark)	AO2 (5 marks)
3		**5 marks** Excellent application of the correct hydration techniques before during and after exercise. The candidate makes reference to timings and volumes of hydration needed. Relevant examples of types of drinks needed. Response clearly expressed using accurate terminology. Well structured with correct spelling, grammar and punctuation.
2		**3-4 marks** Good application the importance of the correct hydration techniques before during and after exercise. The candidate refers to either the times **or** volumes of hydration needed. Adequately expressed with accurate terminology.
1	**1 mark** Knowledge of hydration.	**1-2 marks** Limited application the importance of the correct hydration techniques before during and after exercise. Basic response making no reference to timings or volumes of hydration.
0	No knowledge of the importance of the correct hydration techniques before during and after exercise.	No application of the importance of the correct hydration techniques before during and after exercise.

Question	Mark Scheme	AO1	AO2	AO3	Total
4. (a)	**Analyse, using Figure 4, how self-efficacy can have an effect on performance.** *Indicative content:* <u>Performance accomplishments</u> – performer reminded of previous success of the skill which increases confidence/improves performance e.g. shooter in netball reminded of successful statistics. Previous successful performances are attributed to internal/controllable attributions e.g. rugby player reminded of effort. Performance accomplishments have the best effect on self efficacy. <u>Vicarious experiences</u> - watching another player perform the same skill can raise confidence. e.g. a gymnast watching a fellow club member master a difficult move (helps if similar ability). <u>Verbal persuasion</u> - positive extrinsic feedback/reinforcement can raise confidence/improve performance. e.g. A swimmer being told that their leg action has improved. e.g. More likely to happen if given by a significant other/e.g. The team captain praising a player's pass. Effects are less than performance accomplishments and vicarious. <u>Emotional arousal</u> - understanding the signs of increased arousal. e.g. a sprinter knowing that an increased heart rate is natural pre performance, knowing that an increase in arousal will not lead to failure and can be controlled. e.g. a golfer having strategies to control anxiety to give optimal level of arousal. Links made to: <u>Efficacy expectations</u> - the expectation of the performer to achieve success/achieve their goal. e.g. the gymnast now feels that they can achieve a successful vault, following the influence of the four components of the model, athletic performance is now improved as self-efficacy is higher. e.g. the swimmer performs a successful tumble turn.		2	4	6

Question	Mark Scheme	AO1	AO2	AO3	Total
	Self efficacy can help pursue challenging goals. *Accept any other relevant examples.* *(See banding grid for allocation of marks)*				

Band	AO2 (2 marks)	AO3 (4 marks)
3		**3-4 marks** Excellent analysis of the relationship between self-efficacy and performance. All areas of the diagram are referenced. Relevant examples provided throughout. Response clearly expressed using accurate terminology. Well structured with correct spelling, grammar and punctuation.
2	**2 marks** Good explanation, of the effect of self-efficacy to performance.	**2 marks** Good analysis of the relationship between self-efficacy and performance. At least three areas of the diagram are referenced. Relevant examples provided. Adequately expressed with accurate terminology.
1	**1 mark** Basic explanation, of the effect of self-efficacy to performance.	**1 mark** Limited analysis of the relationship between self-efficacy and performance. Little reference to the areas on the diagram are evident.
0	No application of the relationship between self-efficacy and performance.	No discussion of the relationship between self-efficacy and performance.

Question	Mark Scheme	AO1	AO2	AO3	Total
(b)	**Evaluate how the use of different types of rewards can increase the motivation of a performer:** **No marks for naming type of reward** *2x2 marks* *Up to 2 marks for basic knowledge of reward AND name of motivation.* *Up to 2 marks for evaluation linked to each type of motivation.* **Tangible rewards**: Physical rewards such as medals and money. These should be used sparingly with young athletes to avoid winning a prize being more important than competing well. Links to **Extrinsic motivation** comes from sources outside of the performer and usually involves rewards, for example, prize money, trophies, certificates of recognition. Motivation increases in the short term, level likely to drop once the reward is removed / stopped. Athletes in highly competitive levels of sport may experience decreases in their intrinsic motivation because of the increasing use of extrinsic rewards offered by the media, coaches, and parents. **Intangible rewards**: Praise, recognition, and achievements. Should be used on a regularly to encourage the athlete to repeat the behaviour. Links to **Intrinsic motivation** is the inner drive to succeed, engaging in the task or adhering to the activity for fun, enjoyment and satisfaction. An example would include going to the gym to keep healthy. Over motivation can be a big problem for athletes. Athletes are often under pressure to perform at a high level, so feel the need to train more and more. However, over-motivation and a gruelling schedule can lead to overtraining. Generally, people who participate in sport are more intrinsically motivated. Should the extrinsic rewards disappear, some individuals may stop participating in the activity.	2		2	4

Question	Mark Scheme	AO1	AO2	AO3	Total
(c)	**Explain how the setting of goals can influence performance** *1 mark for basic explanation* *2 marks for detailed explanation* *3 marks for developed explanation* Goals help focus attention/ motivation and are very effective in helping to control anxiety. Can be used to monitor the achievement towards the goal. Give direction to achieve something you want. Milestones to tick off towards the goal. Help with adherence staying on task to achieve the goal. Feel good factor when you have achieved your goal. Setting SMART goals to ensure they are achievable and realistic. Outcome goals are limited without related process and performance goals. If you hit your goal you may feel satisfied even if you did not win. Could give a counter explanation (if goals are too hard) credit this as it is the opposite to the above.		3		3
Totals		**3**	**5**	**5**	**13**

Question	Mark Scheme	AO1	AO2	AO3	Total
5. (a)	**The development of unequal layers based on factors such as income, education, status and power is a definition of** *Award one mark for:* A: Social stratification	1			1
(b)	**Identify two strategies aimed at improving participation in sport for disadvantaged groups** *2x1 mark:* *Campaigns* *Funding* *Access - provision* *Kick it out* *This girl can* *Adapted sports for the disabled* *Media influence* **Plus other relevant examples.**	2			2
(c)	**Discuss the relationship between sport and social mobility** *Indicative content:* **Social mobility- the movement of individuals through a system of social hierarchy. (rags to riches)** Economic and sociocultural factors that affect participation in sport: Time, finance, education, facilities. Sport aspiring young people from low income backgrounds to fulfil their potential. Sport schemes in high deprivation areas using sport for popular **engagement.** **Value** of sport as an educative context capable of facilitating the development of certain attributes and skills needed to achieve personal success. The Sutton Trust findings (research into social mobility).	1	2	3	6

Question	Mark Scheme	AO1	AO2	AO3	Total
	Athletes see sport as a route to social mobility overcoming barriers in society, such as **stereotyping**. This leads to the creation of **role models** and therefore encourages further participation. Influence of Racial stacking Self fulfilling prophecies /glass ceiling effect Gender tagging. (See banding grid for allocation of marks).				
Totals		**4**	**2**	**3**	**9**

Band	AO1 (1 mark)	AO2 (2 marks)	AO3 (3 marks)
3			**3 marks** Excellent discussion (positive and negative relationship) of the importance of sport as an avenue for social mobility. Response clearly expressed using accurate terminology. Well structured with correct spelling, grammar and punctuation.
2		**2 marks** Good application, using examples, to illustrate the importance of sport as an avenue for social mobility.	**2 marks** Good discussion of the importance of sport as an avenue for social mobility. Adequately expressed with accurate terminology.
1	**1 mark** Knowledge of sport as an avenue for social mobility.	**1 mark** Basic application of the importance of sport as an avenue for social mobility.	**1 mark** Limited discussion (that is only one sided) of the importance of sport as an avenue for social mobility.
0	No knowledge of sport as an avenue for social mobility.	No application of the importance of sport as an avenue for social mobility.	No discussion of the importance of sport as an avenue for social mobility.

Question	Mark Scheme	AO1	AO2	AO3	Total
6.	**Discuss the relationship between personality and performance** *Indicative content:* **Trait Theory – (Eysenck)** Personality is inherent and is within the athletes genes, inherited from their parents. This theory maintains that all behaviour is innate and a person has a natural tendency to act in any given situation. These behaviours are consistent (stable and enduring) and can be measured through questionnaires (CASTELLS 16 PF). The problem with this theory is that it does not take into account adapting behaviour to the environment or that behaviour is not always predictable. Trait theory has two main dimensions to personality: Introvert-extrovert dimension and stable-neurotic dimension. Or Type A / B personalities. Type A: Highly competitive, Desire to succeed, Need to be in control and Prone to stress. Type B being the opposite. **Social learning Theory – (Bandura)** Personality is learned through environmental experiences and the influence of others. (nurture). It is therefore not stable but constantly changing as a result of social situations. Personality evolves through modelling and reinforcement; modelling themselves on athletes they can relate to and behaviour being positively reinforced and therefore repeated. May go onto reference … Bandura identified four main stages of observational learning: DARMMM **Interactionist Approach –** Personality is a result of inherent traits and learned experiences. It is widely agreed that it is a combination of both theories (social learning and trait) that explains behaviour. Situations can trigger different reactions. E.g. when environmental factors are strong they are more likely to affect behaviour than personality traits. Celebrating a win for an introvert.	4	4	6	14

Question	Mark Scheme	AO1	AO2	AO3	Total
	Lewin - **B=f(PE)** Behaviour is the function of the sum of the individual's personality (traits) and the environment/situation (social learning). e.g. a normally confident footballer missing a penalty as they have before. Hollander (1967) - used the concentric ring theory to explain the interactionist approach. Psychological core is the real you and stays constant and stable. Typical response in which most situations can be modified and learnt and role related behaviour that is the dynamic and changeable personality **Biological Theory – (Sheldon)** Sheldon noted that personality was categorised into three personalities based on physical make-up. Personality was demonstrated based on physical attributes and the relationship between build and behaviour. The three categories include: Endomorph - The Endomorph is physically quite 'round', and is typified as the 'barrel of fun' person. They tend to have: Wide hips and narrow shoulders, (pear-shaped). Quite a lot of fat spread across the body. Psychologically, the endomorph is: Sociable, fun-loving, tolerant, even-tempered, relaxed. Ectomorph - The Ectomorph is a form of opposite of the Endomorph. Physically, they tend to have: Narrow shoulders and hips. A thin and narrow chest and abdomen. Very little body fat. Even though they may eat as much as the endomorph, they never seem to put on weight (much to the endomorph's chagrin). Psychologically they are: Self-conscious, introverted, inhibited, socially anxious, intense, thoughtful. Mesomorph - The mesomorph is somewhere between the round endomorph and the thin ectomorph. Physically, they have the more 'desirable' body, and have: Broad shoulders and narrow waist (wedge-shaped). Muscular body. Very little body fat.				

Question	Mark Scheme	AO1	AO2	AO3	Total
	They are generally considered as 'well-proportioned'. Psychologically, they are: Adventurous, courageous, assertive, competitive, risk taker, extroverted. Psychologically, the endomorph is: Sociable, fun-loving, tolerant, even-tempered, relaxed. **<u>Profiling may be used to discuss relationship:</u>** Profiling - sometimes referred to as psychometric testing, this is a means of measuring an individual's personality in a particular situation. It is a measure of behaviour. Examples of personality tests are Eysenck's Personality **Questionnaire**. This test enables the identification of dimensions of personality e.g. introvert/extrovert; stable/neurotic. Cattell's 16 Personality Factor Questionnaire – this measures personality using 16 factors. Personality can also be measured by **observation**. BENEFITS OF PERSONALITY PROFILING • It could be used to recommend participation in sport and could help to lead a person towards an active, healthy and balanced lifestyle. • It is time efficient. • You could gain a deep understanding of each individual. • It could identify personality strengths and weaknesses. • It can help identify the type of coaching/leading/training to which the athlete best responds. • It can enable appropriate strategies to be put in place to help athletes to achieve their potential e.g. anxiety control. LIMITATIONS OF PERSONALITY PROFILING • Not an accurate predictor of those who are likely to participate or excel in sport or physical activity. • When completing questionnaires, many people do not respond honestly • Profiling results are usually subjective. Conclusions may be influenced by personal opinions and are not supported by scientific evidence.				

Question	Mark Scheme	AO1	AO2	AO3	Total
	• There is a danger that profiling may stereotype a person (See banding grid for allocation of marks)				
		4	4	6	14

Totals		**24**	**24**	**24**	**72**

Band	AO1 (4 marks)	AO2 (4 marks)	AO3 (6 marks)
3	**4 marks** Excellent knowledge of personality theories	**4 marks** Excellent application of theories of personality to performance. Appropriate examples from sporting situations provided throughout.	**5-6 marks** Excellent discussion of the RELATIONSHIP between personality and performance. The response is clearly expressed with accurate use of terminology. Correct spelling and grammar and application.
2	**2-3 marks** Good knowledge of personality theories.	**2-3 marks** Good application of theories of personality to performance. Some appropriate examples from spotting situations provided throughout.	**3-4 marks** Good discussion of the RELATIONSHIP theories of personality. The response is adequately expressed and shows an accurate use of terminology.
1	**1 mark** Limited knowledge and understanding of personality.	**1 mark** Basic application of personality to performance. Few links to sporting examples throughout.	**1-2 marks** Limited discussion little or no relationship with personality and performance. Basic information is provided . Basic terminology. Some structure in writing but errors in spelling, punctuation and grammar.
0	No knowledge of personality theories and their relationship with sport.	No application of knowledge of personality theories and their relationship with sport.	No discussion of personality theories and their relationship with sport.

	Q1	Q2	Q3	Q4	Q5	Q6	Total
AO1	4	0	9	3	4	4	**24**
AO2	3	5	5	5	2	4	**24**
AO3	6	4	0	5	3	6	**24**
Total	**13**	**9**	**14**	**13**	**9**	**14**	**72**