

# PHYSICAL EDUCATION

Paper 9396/11

Written Paper

The AS Physical Education Examination consists of three compulsory questions, each worth 30 marks and divided into various sub-sections. **Question 1** concerns the Applied Anatomy and Physiology section of the specification. **Question 2** is about Acquiring, Developing and Performing Movement Skills, while **Question 3** assesses understanding of Contemporary Studies in Physical Education and Sport.

The standard of responses varied considerably across the cohort taking the examination. Many candidates did not clearly demonstrate detailed knowledge of the specification and struggled to produce extensive and comprehensive answers. Although there were some scripts showing a certain amount of suitable subject knowledge, many scripts lacked even basic understanding of the question requirements. The actual depth of knowledge required to correspond to the mark scheme was frequently missing. There was the perennial problem of candidates not fully reading the question and/or not understanding the command word. Whatever type of question is being answered, it is important that candidates respond in a suitable way. Examiners use command words to indicate the detail of the response required and mark allocations to help candidates decide the length and depth of their answer. Many candidates appear to only scan questions and respond to their chosen key terms, rather than read the whole question in detail and respond in an appropriate way for the style of question. This is especially so when the command word is *explain*, where either a reason or a response of some detail is required.

## Section A – Applied Anatomy and Physiology

**Question 1** examined candidates' understanding of the kicking action; muscle fibre types; regulation of heart rate; the cardiac output of a trained and untrained performers; the function of the systemic circulatory system; redistribution of blood during exercise; the features of the lungs assisting in gaseous exchange and the transfer of oxygen from the lungs to the working muscles.

In part (a), candidates had to identify the muscle contraction, movement and agonist muscles involved in the striking leg of a penalty kick. Answers varied considerably. Although some were able to identify certain items correctly, few recognised all components. Many candidates failed to understand that the question required them to analyse movement from position A to B and often concentrated on position A only. The agonist muscle for the knee joint was often identified as the quadriceps group rather than by individual muscle names. Flexion and extension were regularly put the wrong way round - i.e. for the knee/hip. Many candidates incorrectly identified the muscle contraction at the hip as isometric.

Part (b) required candidates to identify the muscle fibre type used predominantly by a 100 m sprinter and to explain how the structure and function of this type of muscle fibre make it suitable for sprinting. Many candidates correctly identified the predominant use of fast twitch fibres. However, many candidates got the names of the specific fast twitch types wrong or confused. Some candidates suggested that slow twitch fibres were required. Candidate's knowledge of the structural and functional benefits of fast twitch fibres was often restricted to simplistic suggestions such as "they are good for going fast" or "they are big", whereas the requirement was for technical knowledge. Where correct, out of the many listed characteristics in the mark scheme, low numbers of mitochondria, low myoglobin content, low capillary density, high speed of contraction and high force production were the most commonly used responses.

In part (c) (i), only a minority of candidates gained full credit by clearly identifying the receptors or other factors involved in the control of heart rate during exercise. Although many candidates knew that the medulla was involved, many suggested it was the respiratory control centre, rather than the cardiac centre, that regulates heart rate. Candidates should not have stated "CCC" as this is too vague. The most common identified receptors were baroreceptors and chemoreceptors.

In part (c) (ii), most candidates struggled to score at all. Those that did tended to get the  $Q=SV \times HR$  equation correct, but lacked any knowledge relating to the question.

The function and processes of the systemic circulatory system in part **(d) (i)** were misunderstood by the majority of candidates. Some candidates confused the pulmonary system with the systemic system. Other candidates lost marks by not identifying the function and the process - e.g. transporting oxygenated blood to the muscles (function) via the aorta/arteries (process).

In part **(d) (ii)**, candidate's knowledge of how blood is redistributed during a sporting contest was limited. The most common answers were those of vasoconstriction and/or vasodilation but these were often confused with each other or described in a simplistic form. Pre-capillary sphincters were seldom named.

Part **(e) (i)** was concerned with the structural features of the lungs that assist gaseous exchange. Candidates must ensure statements are clarified: for example, "thin" was given as a structural feature, without directly stating *what* was thin. Again, the concept of a "large surface area" often did not describe what has the large surface area.

In part **(e) (ii)**, candidates had to explain how oxygen is transferred from the lungs to the working muscles. Answers must be expanded upon: "in the blood" is too vague, for example, and very few candidates managed to give a detailed description of the partial pressures of oxygen and carbon dioxide at the lungs and/or the muscle site. Few, if any, candidates showed understanding of the concept of a pressure gradient.

### **Section B – Acquiring, Developing and Performing Movement Skills**

**Question 2** examined candidates' understanding of simple and complex skills; the memory process when performing movement skills; closed loop control; the three phases of learning movement skills; the effect of childhood experiences on skill development; methods of motivation and how to strengthen a stimulus-response bond.

Candidate's responses to part **(a)** were mixed. The majority of candidates suggested that simple was "easy" and complex was "hard": further detail is required in relation to the number of stimuli to process/amount of information to process, etc. Examples given were often the same for simple and complex. However, many candidates gained credit for their examples, more so than for their explanation.

In part **(b)**, candidates were asked to describe the memory process when performing movement skills. Although many candidates confused the role of the STSS, STM and LTM, some candidates showed a good knowledge of the main process. The most common answer referred to the storage capacity of the LTM but often misunderstood when selective attention takes place.

Part **(c)** asked candidates to explain what is meant by closed loop control. Many candidates confused closed loop control with closed skills and, as a result, gained little credit. The most common creditworthy answer focused on the use of feedback. The role of the memory trace and perceptual trace was largely unknown by candidates. Although feedback was often mentioned, the link to error detection was seldom given by candidates.

In part **(d)**, candidates were asked to describe three phases of learning movement skills. Some candidates knew the names of the cognitive, associative and autonomous phases, but to gain further credit these must also be described. Answers need to utilise appropriate vocabulary and be of appropriate complexity – e.g. "you need help" [in the cognitive stage] will gain less credit than reference to a "reliance on external feedback".

Part **(e)** was concerned with explaining how childhood experiences/environmental exposure affect motor skill development. Many candidates thought that environmental exposure related to things like global warming or rising world temperatures. The most common creditworthy answer referred to being "more likely for learning to take place if children practise". Some also gave some thought about what significant others around you do and how they may be copied. However, more often than not, candidates responses failed to provide the correct detail as required in the mark scheme.

Responses to part **(f)** varied considerably. The majority of candidates were able to identify intrinsic and extrinsic motivation, although they should then go on to expand on their answer if they are to gain further credit. Although some candidates made reference to praise/punishment, few were able to link their answers to the S-R bond or to goal setting, controlling arousal/anxiety or enjoyment.

Part **(g)** asked candidates to explain the term S-R bond and suggest how this bond can be strengthened. Most candidates attempted to describe what this bond is giving a wide variety of answers. Many also went

on to explore positive and negative reinforcement. The mechanics behind the use of negative reinforcement were usually incorrect, confusing it with punishment. There was minimal reference to Thorndike's laws.

### **Section C – Contemporary Studies in Physical Education and Sport**

**Question 3** examined candidates on the differences between recreation and sport; reasons for violence during sport; real and perceived risk; the four levels of the sporting development pyramid; what is needed to stay at the elite level; showing respect for other performers; how gamesmanship is used and explaining the characteristics of commercial sport.

In part **(a)**, candidates were asked to explain the difference between swimming as a recreational activity and swimming as a sport. Some candidates referred to play in their answer. Many responses gained credit, largely due to reference to competition, ability and facilities required. Many candidates also gained credit for referring to the fitness level or training commitment required.

Part **(b)** allowed candidates to express their thoughts as to why some people become violent during competitive performance. Most candidates gained credit for this question, although drug use was regularly a misconception. Pressure to win from others and the "win at all costs" ethic tended to be the most common answers.

The majority of candidates were able to identify real risks in part **(c)**, although it was the minority that knew the difference between real and perceived risk. The examples given were generally real risks. Some candidates did manage to make the link between "thinking it is risk" and "perceived risk". A common problem was that candidates gave virtually the same answer for perceived and real risk.

Part **(d) (i)** was concerned with explaining the four levels of the sport development pyramid. This was answered with some success, although many candidates tended to score better in the understanding of the excellent/elite level rather than the foundation/introduction to sport/grass roots level. Many candidates confused the performance level with the elite level. When explaining the participation level, candidates' responses need to be more complex than, for example, "this is where they participate."

In part **(d) (ii)**, candidates were asked to explain what is needed for a performer to stay at the elite level. Although many candidates gained credit for reference to skill levels, funding and dedication to training, other answers such as good organization/structure, high quality facilities/equipment and sponsorship were not as common. On the whole however, most candidates scored well in this question.

Part **(e) (i)** required candidates to describe how a performer could show respect for others on the field of play. The most common responses referred to shaking hands or helping an injured opponent. Very few mentioned respect of national anthems or to refrain from deviant behaviour. Many candidates gained full credit on this question.

Candidates should ensure they read the question thoroughly, and understand the terms being used: in part **(e) (ii)** candidates referred to cheating, taking drugs and deliberately diving, which are not examples of gamesmanship as they fall outside the rules of the sport. Very few candidates gained reasonable credit in this question, although some did come up with time wasting at a throw-in or equivalent.

In part **(f)** candidates were required to explain the characteristics of commercial sport. Many ignored the characteristics and concentrated on the impact. Although many said money was generated, few mentioned the "profit driven/need to make money" characteristic. The "business side of sport" was often neglected, with candidates tending to state things like "people do not attend stadiums as they can watch it on TV".

# PHYSICAL EDUCATION

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Paper 9396/12

Written Paper

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The standard of responses varied considerably across the cohort taking the examination. Many candidates demonstrated clear, detailed knowledge of the specification and produced extensive and comprehensive answers. On the other hand, many scripts lacked even basic understanding of the question requirements. There was the perennial problem of candidates not fully reading the question and/or not understanding the command word. Whatever type of question is being answered, it is important that candidates respond in a suitable way. Examiners use command words to indicate the detail of the response required and mark allocations to help candidates decide the length and depth of their answer. Many candidates appear to only scan questions and respond to their chosen key terms, rather than read the whole question in detail and respond in an appropriate way for the style of question. This is especially so when the command word is *explain*, where either a reason or a response of some detail is required.

## Section A – Applied Anatomy and Physiology

**Question 1** examined candidates' understanding of the kicking action; muscle fibre types; regulation of heart rate; factors affecting stroke volume; the pulmonary circulatory system; changes in blood pressure; the mechanics of breathing and the physiological changes that make gas exchange more efficient.

In part **(a)**, the majority of candidates were able to identify the joint type operating at the hip, but many considered the ankle joint to be a condyloid, rather than a hinge, joint. Descriptions of the type of muscle contraction involved at the hip varied between the acceptable isotonic or concentric, and the incorrect isometric and eccentric. Descriptions of the type of movement also varied across the candidature, with many incorrectly identifying hip extension and ankle dorsi-flexion as the movements. Candidates need to appreciate that analysis of muscle contraction is generally concerned with movements, and therefore need to carefully read the question to grasp the actions involved. Similarly, in order to describe movements, images are often used and, invariably, this involves what is essentially a starting and finishing position (labelled A and B in the 2013 paper). The wording of the question asked for an analysis of the striking leg from position A to the finishing position B, not at position A and at position B separately.

Part **(b)** required candidates to identify the muscle fibre type used predominantly by a marathon runner and to explain how the structure and function of this type of muscle fibre make it suitable for marathon running. The vast majority of candidates correctly identified the predominant use of slow twitch (type 1) fibres. Candidate's knowledge of the structural and functional benefits of slow twitch fibres was often restricted to simplistic suggestions such as "they are good for endurance" or "they use aerobic energy", whereas the question requirement was for technical knowledge. Where correct, out of the many listed characteristics in the mark scheme, high numbers of mitochondria, high myoglobin content, high capillary density, ability to resist fatigue, low speed of contraction and low force production were the most commonly used responses.

In part **(c) (i)**, only a minority of candidates gained full credit by clearly identifying sympathetic and parasympathetic as the neural factors that increase and decrease heart rate respectively. The release of the hormone adrenalin was generally well-known, as was, to a lesser extent, the controlling influence of the cardiac control centre in the medulla, and the impact that these factors have on the sino-atrial node.

In part **(c) (ii)**, very few candidates were able to identify factors that influence stroke volume. Many responses were superficial, talking about "the need for more oxygen" or "because we need more blood going to the muscles". The command words for this question were *identify* and *explain*. Candidates need to ensure they address both command terms if they are to achieve credit.

The function and processes of the pulmonary circulatory system in part **(d) (i)** were clearly understood by the majority of candidates. Some candidates confused the pulmonary system with the systemic system and described circulation from the heart to the body tissues and back to the heart. Other candidates lost marks by not identifying the transporting blood vessels to and from the lungs. A large number did achieve maximum credit on this question however.

In part **(d) (ii)**, candidate's knowledge of changes to blood pressure during exercise was limited. Candidates need to address the *explain* aspect of the question: candidates restricted their response to talking about blood pressure in general, rather than explaining the different affects that exercise has on systolic and diastolic pressures. Candidates found this the most taxing portion of **Question 1**.

Part **(e)** was concerned with changes to the mechanics of breathing during exercise. Many candidates gained full credit for this question through knowledge of the muscles involved and the way those muscles increase the rate and depth of breathing. Candidates only needed to name one muscle assisting inspiration or expiration to gain credit.

In part **(f)**, few candidates were able to clearly identify the physiological changes that make gas exchange more efficient. The majority of candidates suggested changes that simply do not happen such as "the lungs get bigger", "there are more alveoli", and "tidal volume increases". It would appear that candidates concentrated their responses on the alveolar gas exchange process, when, in fact, the increased efficiency is primarily due to the blood/muscle gas exchange system and identifying responses such as increased capillary density, more red blood cells, increased blood volume, increased numbers of mitochondria, and increased levels of myoglobin would have gained credit.

### **Section B – Section B – Acquiring, Developing and Performing Movement Skills**

**Question 2** examined candidates' understanding of the characteristics of skilled performance; observational learning; classification of skills; types of feedback; motor programme creation and storage; role of perception in information processing and drive reduction theory.

Candidate's responses to the characteristics of skill in part **(a)** were generally limited. The majority of candidates suggested that *goal directed* related to goal-setting, rather than the correct response of having a clear intention or of being planned. Similarly the concept of *following a technical model*, which really means involving learning or practice of a specific movement pattern, was largely suggested to be using the correct technique, which was not credited as it was essentially repeating the question. There were better responses concerning *aesthetically pleasing* which was usually correctly identified as being concerned with "looking good", or words to that effect.

In part **(b)**, candidates were asked to explain the stated elements of observational learning. Candidates must ensure they do not simply repeat the terms given in these questions, instead focussing on what these terms actually mean, and using their knowledge appropriately to answer the question posed. Comments such as "attention means paying attention", "retention means being able to retain information" or "motivation means being motivated" were considered too simplistic to deserve credit. That being said, alternative basic answers such as "attention means watching carefully", "retention means being able to remember", or "motivation means having the necessary drive", were all deserving of credit. It needs stating that the element of *motor production* is not concerned with performance of the skill itself, but rather it is about whether the performer is capable of repeating the observed skill.

Part **(c)** asked candidates to describe, with practical examples, three skill classifications. Responses lacking either a clear description or a suitable practical example were not credited. Discrete skills were generally well known as having "a clear beginning and end", with numerous correct examples being provided. Serial and continuous skills were even more regularly correctly identified as having "several discrete elements" and being "difficult to breakdown into sub-routines" respectively. The most common exemplars of these skill groupings were triple jumping and cycling or running.

In part **(d)**, candidates were asked to describe four different types of feedback. Intrinsic feedback was correctly described by the majority of candidates as being "kinaesthetic" or "from within". Terminal feedback being at the "end of performance", while concurrent feedback was "during performance", were also commonly provided correct responses. Several candidates failed to gain credit because they suggested that positive feedback was positive, which was considered to be simply repeating the question, rather than suggesting it was "motivational" or "encouraging".

Part (e) was concerned with motor programmes; how they are created and stored. Responses to the latter part were much more prevalent than those to the former. Many candidates suggested the need for “repetition”, but did not provide the examples that were requested in the question: candidates must ensure they address all parts of the question. The concept of motor programmes being “stored in long-term memory” was known by many; for a number of candidates this was the only credit-worthy response. Hardly any candidates knew the concepts of association, meaningfulness, uniqueness and intensity, in terms of creating motor programmes.

Responses to part (f) varied considerably. Although the majority of candidates were aware of the *place* of perception in a basic information processing model, many were unable to describe its role in interpreting information. Few candidates mentioned the DCR process of perception, although the concept of “selective attention” and the use of “motor programmes from long-term memory” was known and explained in many cases.

Part (g) asked candidates to describe the drive reduction theory and explain its affects on learning motor skills. Many candidates confused drive reduction theory with drive theory of arousal and achieved little or no credit. Where candidates did talk about the correct theory, the majority did so by concentrating on how the theory affects learning rather than describing the theory itself: again, it is imperative that candidates recognise command terms and respond to the question appropriately. Candidates generally gained credit for describing how “motivation is reduced” and that there is a need to “set new goals”.

### **Section C – Contemporary Studies in Physical Education and Sport**

**Question 3** examined candidates on the topics of the characteristics of play; reasons for not taking part in physical activity; skills developed through involvement in outdoor recreation; solutions to the problem of drugs in sport; the true spirit of sportsmanship and the benefits of, and reasons for, investing in sponsorship.

In part (a), candidates were asked to describe the characteristics and values of play. The characteristics of play were well known by the vast majority of candidates and the ideas of “spontaneity”, “enjoyment” and “no set rules” were common responses. Many candidates failed to differentiate between the different parts of their answer, simply listing benefits of play. Where differentiation was made, benefits to children of “social interaction” and to adults of “stress relief” were the most used, and often the only, responses.

Part (b) allowed candidates to express their thoughts as to why some people do not take part in physical activity. The majority of candidates were able to gain credit for responses such as “lack of time/money”, “lack of facilities”, “health problems” and “lack of fitness”. Quite often the cultural limitations to participation were over-emphasised with candidates writing in great detail about the problems of participation with certain cultural and/or gender-based groups.

The majority of candidates were able to identify skills that could be developed through outdoor recreation as required by part (c). Some candidates failed to realise that outdoor education is not just taking part in activities outdoors, but is a more specific term linked to certain types of activity. Concepts of “leadership”, “teamwork”, “environmental knowledge” and “specific skills” were common correct responses.

Part (d) (i) was concerned with measures to solve the continuing problem of drugs in sport. The majority of candidates correctly suggested the need for “life-time or stricter bans” and “out of competition or increased testing”. Many responses were limited to just those two suggestions. Rarer responses involved the ideas of making drug use “a criminal offence”, “educating performers about drugs”, “increased funding for drug-testing” and “increasing awareness about the consequences of positive tests”.

In part (d) (ii), candidates were asked to describe the true meaning of sportsmanship. Correct responses followed on from the previous question; the idea of not taking drugs and not cheating. The majority of the candidates were then able to develop these thoughts to gain credit for suggesting that sportsmanship involved “playing by the rules” or “respecting fellow competitors” or “winning and losing gracefully”.

Part (e) (i) required candidates to explain the benefits of sponsorship to a performer. Many candidates decided to rephrase the question and talk about the benefits of sponsorship in general. It was felt that the idea that sponsorship provided financial assistance was too simplistic for credit. What was required was what the additional finance enabled. Where correctly attempted, responses such as providing finance for equipment or competition were commonly credited. Many also gained credit for seeing the benefit that

sponsorship provides in terms of promoting the performer as a celebrity. The use of financial stability to permit “full-time training” and “future security” was surprisingly rare.

Responses to part **(e) (ii)** about the reasons for providing sponsorship, were generally good, with many candidates achieving full credit. The ideas of sponsorship providing a means of advertising and therefore increased revenues were quite common across the candidature, as was the idea of “tax benefits” and “provision of hospitality”. The philanthropic reason for sponsorship was hardly ever mentioned.

# PHYSICAL EDUCATION

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Paper 9396/13

Written Paper

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The standard of responses varied considerably across the cohort taking the examination. Many candidates demonstrated clear, detailed knowledge of the specification and produced extensive and comprehensive answers. On the other hand, many scripts lacked even basic understanding of the question requirements. There was the perennial problem of candidates not fully reading the question and/or not understanding the command word. Whatever type of question is being answered, it is important that candidates respond in a suitable way. Examiners use command words to indicate the detail of the response required and mark allocations to help candidates decide the length and depth of their answer. Many candidates appear to only scan questions and respond to their chosen key terms, rather than read the whole question in detail and respond in an appropriate way for the style of question. This is especially so when the command word is *explain*, where either a reason or a response of some detail is required.

## Section A – Applied Anatomy and Physiology

**Question 1** examined candidates' understanding of a swimming start; muscle fibre types; heart rate measures; factors affecting venous return; factors affecting blood pressure; the changes in blood pressure and velocity during circulation; transport of blood gases and the factors affecting respiratory rate.

In part **(a)**, the majority of candidates were able to identify the working muscle and the action at the ankle joint, namely the gastrocnemius and plantar flexion respectively. Descriptions of the type of muscle contraction involved at the hip varied between the acceptable isotonic or concentric, and the incorrect isometric and eccentric. Descriptions of the type of movement also varied across the candidature, with many incorrectly identifying hip flexion as the movement and then exacerbating the problem by suggesting that the agonist was the quadriceps or hamstrings. Apart from the fact that "quadriceps" is actually incorrect, the specification requires more detail than group names for muscle agonists. Candidates need to appreciate that analysis of muscle contraction is generally concerned with movements, and therefore need to carefully read the question in order to grasp the actions involved. Similarly, in order to describe movements, images are often used and invariably this involves essentially a starting and finishing position (labelled A and B in the 2013 paper). The wording of the question asked for an analysis of the sprint start by a swimmer from position A to position B, not at position A and at position B separately.

Part **(b)** required candidates to identify the muscle fibre types used during a swimming race, and to explain how the structure and function of one of these fibre types makes it suitable for that particular part of a swimming race. The vast majority of candidates correctly identified the use of slow twitch (type 1) and fast twitch (type 2) fibres. Identification of fast oxidative glycolytic (type 2a) and/or fast twitch glycolytic fibres (type 2b) was much less common. Many candidates did not identify clearly which stage in a race the different types of muscle fibres were used, and therefore did not gain credit. Candidate's knowledge of the structural and functional benefits of different types of fibre were often restricted to simplistic suggestions such as "slow twitch are good for endurance" or "fast twitch use anaerobic energy", whereas the requirement was for technical knowledge. Where correct, out of the many listed characteristics in the mark scheme, high numbers of mitochondria, high myoglobin content, high capillary density, ability to resist fatigue, low speed of contraction and low force production were the most commonly used responses for slow twitch fibres, with the opposite adjectives used for fast twitch fibres.

In part **(c) (i)**, the majority of candidates gained credit by clearly identifying the relationship between heart rate, cardiac output and stroke volume. Candidates should consider the number of marks allocated to a question in order to gauge level and depth of content required. In this instance, many candidates did not



determine that there was a need for more than a simplistic equation for the two marks allocated, and failed to provide a suitable definition of one of the terms for full credit.

In part **(c) (ii)**, the majority of candidates were able to identify factors that affect venous return. Candidates must address all command terms to gain full credit however: several candidates identified a factor without an explanation when answering this question, thus limiting their ability to gain maximum credit. Descriptions of the skeletal pump and the respiratory pump varied considerably, but had to suggest some notion of compressing veins, in order to be credited.

The physiological factors affecting blood pressure in part **(d) (i)** were not clearly understood by the majority of candidates. Some candidates gained credit by suggesting that blood pressure is essentially due to the heart contracting but, generally, responses lacked detail and candidates were more inclined to talk in simplistic terms rather address the technical aspects of factors affecting peripheral resistance, such as blood viscosity and length or cross-sectional area of the vessels.

In part **(d) (ii)**, candidate's knowledge of the reasons (command word used was *explain*) for changes to blood pressure was limited. Generally, candidates restricted their response to talking about blood pressure in general, rather than explaining the different affects that cross-sectional area has on blood pressure and blood velocity in different parts of the systemic circulation.

Part **(e) (i)** was concerned with how oxygen and carbon dioxide are transported by blood. The vast majority of candidates gained full credit for this question through knowledge of the role of haemoglobin in the transport of oxygen as oxyhaemoglobin and carbon dioxide as carbaminohaemoglobin. Credit was also gained for the relatively simplistic idea that both these gases dissolve in plasma. Note that, although not required, many candidates provided accurate indications of the proportions of the gases transported in different ways.

In part **(e) (ii)**, many candidates were able to clearly identify the factors that control respiratory rate during exercise. The role of the respiratory control centre in the medulla was well known, as were the roles of various receptors. The vast majority of candidates correctly identified adrenalin release as a controlling influence.

### **Section B – Acquiring, Developing and Performing Movement Skills**

**Question 2** examined candidates' understanding of the factors affecting reaction time; strengthening of S-R bonds; characteristics of closed skills; schema theory rules; functions of feedback; transfer of learning and the inverted-U theory of arousal.

Candidate's responses to the factors affecting reaction time in part **(a)** were generally good, with the majority gaining full credit. Typical responses were concerned with age, gender, fitness levels and experience. Note that the command word used was *give*, which is equivalent to *state* and therefore did not require the extensive descriptions of how the factors affect reaction time which many candidates provided.

In part **(b)**, candidates were asked to explain what was meant by an S/R bond. The problem for candidates was that the phrase "stimulus response (S/R) bond" was used in the question and was therefore not credited as an answer. The majority of candidates failed to gain the available mark because they simply repeated the terms in the question. Use of alternative terms such as "behaviour/action" and "signal/situation" did receive credit, as did suitable examples of an S/R bond. Suggestions for ways to strengthen the S/R bond were varied, but generally fell into two main groups; the technical, which were concerned with Thorndike's laws, and the general, which tended to talk about different forms of reinforcement, repetition and the use of feedback.

Part **(c)** asked candidates to provide three characteristics of closed skills. The majority of candidates were able to suggest the concept of closed skills being "unaffected by the environment". Many also suggested that closed skills are "self-paced". A smaller number gained further credit by identifying "autonomous" or "few decisions" as characteristics.

In part **(d)**, candidates were asked to describe the four rules of schema theory. In general, candidates either knew all four rules or were unable to provide any clear descriptions. Simplistic terms/phrases were sufficient to gain marks, so that responses such as "use the environment", "decide what to do", use "kinesthesia" and "use knowledge of results" gained credit where appropriate.

Part (e) was concerned with the functions of feedback. Many candidates suggested that feedback could “correct mistakes” or “improve skills”, but the majority of candidates failed to gain credit in this question, with simplistic responses such as “to help performance” not being credited. If candidates had referred to the different forms of feedback such as knowledge of results and knowledge of performance, they would have been credited. Similarly the concepts of feedback to motivate and to control arousal were probably known, but not suggested by most candidates.

Responses to the idea of transfer of learning in part (f) were generally good, although candidates must ensure they address all aspects of the question: in this instance, a number of candidates did not provide an explanation as to how transfer can be positive or negative to complement their discussion of what transfer of learning is. Many candidates suggested that positive reinforcement provided “positive effects on learning” or negative transfer provided “negative effects on learning”. These were considered to be too repetitive of the question to be creditable. The simple ideas that “positive transfer helps learning” and “negative transfer hinders learning” were sufficient for credit.

Part (g) asked candidates to use the inverted-U theory to explain how arousal affects performance. Credit was given for a correctly drawn and labelled diagram of the inverted-U, but in many drawings, the axes were incorrectly labelled. Although most candidates were able to explain the basis of inverted-U theory, they often failed to fully explain the different aspects of the inverted-U in terms of how differing levels of arousal affect performance.

### **Section C – Contemporary Studies in Physical Education and Sport**

**Question 3** examined candidates’ understanding of levels of organisation within physical activities; the benefits of taking part in physical activity; reasons why some performers might take performance-enhancing drugs and measures to solve that problem; the effects of media on the nature of competition; the meaning of the term elite performer and the qualities needed to achieve excellence.

In part (a) (i), candidates were asked to explain the meaning of the phrase *level of organisation*. The majority of candidates answered this question by literally repeating it; “the level of organisation is how organised an activity is”. Surprisingly few candidates could describe the ideas of levels of pre-planning or control by external agencies, or the amount of regulations involved.

Part (a) (ii) allowed candidates to express their thoughts as to why play has the lowest level of organisation. Most candidates were able to recall their knowledge of the characteristics of play to achieve credit, with ideas such as “play is spontaneous”, “play has few rules” and “play has varied numbers and/or time” being quite common responses.

The majority of candidates were able to identify the characteristics of sport as required by part (a) (iii). Most candidates readily identified the idea that sport is competitive, has officials and has rules to achieve full credit.

Part (b) was concerned with the benefits of participating in physical activity. Again, the majority of candidates achieved full credit by suggesting benefits such as “meeting others”, “increasing fitness”, “developing teamwork” and “reducing stress”.

In part (c), candidates were asked to explain why some performers may choose to take drugs and to describe methods that are used to solve that problem. Many candidates did not provide the basic supposed benefits of drugs, in that they increase muscle mass and/or allow the performer to train harder. The majority of candidates did realise that it was the pursuit of money and possible pressure from others that were the main reasons for taking drugs. Knowledge of possible solutions was often limited to the ideas of “strict testing” procedures and “extended bans”. Although many candidates suggested the development of better tests and the educating of athletes, few candidates identified the idea of a unified approach through WADA.

Part (d) required candidates to explain how the media has changed the nature of sport. Many candidates responded to this question by considering how the media affects the performer, rather than how it has affected the sport, which meant that few candidates achieved full credit. Candidates must ensure they read the question carefully and identify exactly *what* is required in an answer. Most candidates identified the idea that the media gives performers a higher profile and increased income, but comes with an even greater intrusion into the performer’s private life.

In part **(e) (i)**, the majority of candidates were able to gain some credit by suggesting that elite performers were “the best” at their chosen activity, and this was often linked to the idea of national or professional standard to gain full credit.

Responses to part **(e) (ii)** were generally good, with many candidates achieving full credit by describing some of the physiological and psychological qualities required to achieve excellence. The ideas of performers requiring high skill and fitness levels were quite common, as were terms such as “determination”, “motivation” and “perseverance”.

# PHYSICAL EDUCATION

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**Paper 9396/02**  
**AS Coursework**

## **Key Messages**

1. Moderation in 2013 has been based on both the current, updated version of the Coursework Guidelines Booklet and the previous version which was discontinued in 2013. Candidates have not been penalised or gained an advantage according to which version centres have used.
2. Centres who have used the new forms and assessment conditions have reported no problems with their use.
3. All Centres must use the new Guidelines Booklet and forms for assessment in 2014. Centres must read the detail of each activity before it is taught and before it is assessed.
4. New assessment forms exist for some activities.
5. AS evidence can not be used at A2 and vice versa.
6. Weight Training and Hill Walking can now not be used for Action Plans.
7. Centres are asked to complete a dispatch form included in the back of the Guidelines Booklet to aid checking and use of coursework by Cambridge.

## **General Comments**

What is clear is the enthusiasm and effort that so many Centres and candidates demonstrate. Filming the evidence is difficult and time consuming. Many Centres do a very good job. The overall quality of teaching and candidate performance should be applauded. Some performances are clearly exceptional. Other candidates with lesser ability have worked very hard (sometimes over many years) to achieve a high standard in their activity. Teachers are obviously committed to maximising the ability of candidates.

## **Filmed Evidence**

The quality, quantity and type of evidence varies across the whole range. The majority of Centres produce good quality filmed evidence. In some cases this is excellent. Unfortunately there are also cases where the evidence is very poor. The best Centres clearly review, edit and then, most importantly, check the DVD before dispatch. Other Centres have submitted film that is blurred, where the camera points skywards or where it focuses on the wrong candidate.

The film should show the skill technique and the outcome (e.g. a shot in Basketball or a Tennis serve).

Centres are asked to consider the following issues before the DVD is dispatched.

Are the candidates clearly identified (e.g. by numbered bibs) and have the identifiers been written onto the assessment sheets (please remember that the Moderator will be totally unfamiliar with your candidates)? If unsure, ask someone who does not know the candidates to view the DVD to see if they can determine who is who from the assessment sheet provided.

Is candidate participation very frequent or is there a lot of time when they do not have contact with the ball?

Does the film show the best ability of the candidate(s)? For example, film of candidates in Rugby where there is little or no contact makes moderation very difficult.

Is the filming recent? It is pointless sending in film which is a few months old and writing to the Moderator to say that the candidates are now much better, as the Moderator can only assess on the evidence they see.

Filming of representative games is appropriate. Identification of candidates must be very clear.

## **Selected Activities**

Invasion games (mainly Hockey, Football, Netball, Basketball and Rugby), Badminton, Swimming and Track and Field are the activities that are submitted most frequently. Volleyball, Water Polo and Weight Training are also popular. The other activities that are available are used to a much lesser extent, but it is pleasing to see that nearly all the activities that are in the Guidelines Booklet are selected by some candidates.

## **Action Plans**

In common with other aspects of the Coursework, these have varied considerably. From high quality, superbly presented, well considered work to just one side of very basic work.

Centres must read the syllabus and guidance notes before teaching and assessing this work. The task instructions on page 13 of the Coursework Guidelines Booklet provide a good outline of what is expected. The plan should be applied to the candidate.

Action plans should ideally have a front cover which states the mark, candidate name, candidate number and the activity which is being improved.

Candidates sometimes do not achieve their potential because, although it would seem that they have knowledge, they fail to develop their ideas fully, or focus on issues that do not meet the task description or criteria. The action plan requires candidates to analyse their own performance, assess their strengths and weaknesses, evaluate why these exist, evaluate the factors underlying these weaknesses and decide on the impact each has on the whole performance, and explain how they have reached their conclusions.

Candidates then devise a ten-week plan to improve the whole performance. This will require the setting of 'targets/goals'. They must not rely on attendance at club/school team training nor be a log of participation in a coach/teacher-led plan/lessons. This should demonstrate detailed knowledge of training methods, training content and the application/use of training principles. Training sessions should be detailed. Training sessions will include all aspects of the performance, usually isolated skills, their application in game situations, tactics and fitness. The plan will show progression which is informed by evaluation and adapted to ensure improvement is maintained.

Sessions will be realistic in length and content and frequency. The plan will not include all physical activity undertaken, just the relevant sessions. Missed sessions do not need to be recorded.

Rules/laws, equipment, pitch descriptions, history, and significant persons/role models cannot be credited with marks. Explanation of training principles on their own, without application to the plan, cannot be awarded marks. Diagrams are encouraged, but must be accompanied by an explanation of their relevance to the plan, and an explanation of the training they are demonstrating. Skills cannot be improved by a visit in week one and then never repeated. Goal setting at the beginning of the plan will allow themes to be developed and progressed throughout the plan

It is repeated that Action Plans can not be undertaken in Weight Training and it is also advised that Hill Walking is not appropriate.

Adjustment to marks has been more frequent and more extensive for this aspect of the component.

## **Assessment**

This has ranged from very accurate to a point where Centres have been over three levels too generous in their assessment of performance.

Some Centres will have marked to within a few marks of the criteria and some are very accurate. The moderation process will examine the evidence, aim to give as much credit to the candidate as possible and then arrive at a precise mark for the activity. If the Centre has internally standardised effectively then any difference between Centre marking and the moderation outcome should be consistent across all activities.

An average outcome (sometimes applied to just a limited range of marks) is then applied. Centres should note that for practical activities positive or negative averages are doubled to reflect the fact that two activities contribute to the final mark.

A few Centres have continued to assess activities where the candidates are complete beginners, or at an early stage of developing their ability. Clearly such candidates cannot achieve a performance level that is at A Level standard.

Another problem is that candidates sometimes do not demonstrate their ability in sufficiently demanding conditions. So, for example, a Skier on a elementary run cannot be marked at a high level. Centres are asked to ensure that in their initial planning of an activity, opportunities to film candidates at a demand which demonstrates their ability are available and are planned and used.

In Weight Training the evidence varies enormously. Centres must present evidence that the candidate has followed a program of weight training that has a specific purpose and includes a wide range of weight training stations. A new form for recording a candidates' participation, which should then form the basis of assessment, is available in the new Coursework Guidelines Booklet and must be submitted with coursework.

### **Double Evidence**

Centres are not allowed to submit the same evidence to support AS and A2 marks where they have entered candidates for both examinations in the same year. Equally evidence submitted for AS should not be reused at A2.

### **Comments on Specific Activities**

The following activities have raised issues that Centres are asked to note for next year:

<b>Cross Country:</b>	Candidates must run the specified distance and not one that suits the centre. This is to ensure that comparability between Centres can be maintained. (4k female, 5k male).
<b>Triathlon:</b>	Transition phases must be filmed.
<b>Weight Training:</b>	New training logs must be used and then marks submitted on a centre rank order sheet.
<b>Combat Activities:</b>	Only Judo and Karate are permitted.
<b>Dance:</b>	Three solo dances. Candidate must choreograph the dances. Group dances or dances taken from a School production are not permitted.
<b>Games Activities:</b>	Must include conditioned competitive practices (not simple drills) at a standard that places demand on the candidate.
<b>Cricket:</b>	Assessment on two out of three skill areas.
<b>Outdoor and Adventurous Activities:</b>	Prescribed minimum conditions now apply. Conditions to be entered onto assessment sheets.
<b>Hill Walking:</b>	Navigational skills must be filmed for each individual candidate.
<b>Rowing:</b>	Candidates should be assessed and filmed in sculls or pairs.
<b>Swimming:</b>	Swimming strokes must be filmed.

# PHYSICAL EDUCATION

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Paper 9396/31  
Written Paper

## Key Messages

The vast majority of candidates were well-prepared for the examination. Candidates managed their time well and recognised the differences between the command words in the questions.

## General Comments

There was a significant difference in the quality of the answers to the three areas of the syllabus. **Section A** and **section B** were generally well answered, but only the strongest candidates managed to score highly in **section C**. The best candidates showed detailed knowledge and understanding of each topic and were able to apply this knowledge to the specific needs of the question. Candidates are reminded that in **section C** there is a component of the course that requires discussion, analysis and evaluative comments about the future of the Olympic Games. Many candidates appear to struggle with this type of question. The ability to apply knowledge is a key discriminator and vital for success in this examination.

## Comments on Specific Questions

### **Section A: Exercise and Sport Physiology**

#### **Question 1**

- (a) This question was consistently well answered. It was pleasing to see that most candidates recognised that although the lactic acid system is predominant, there are also contributions from ATP splitting and the ATP-PC system to provide energy for the race.
- (b) Most candidates knew what OBLA stands for and identified exercise intensity and fitness level as key factors. Better candidates explained it in detail and gave a range of factors.
- (c) Candidates must be aware that when outlining the principle of specificity they must use an alternative word other than 'specific' to gain credit. For example training must be suitable or relevant to the sport. Most candidates were able to expand on their answer and recognised the need for four different examples of specificity to gain full credit.
- (d) Some candidates wrote in great detail about the causes of DOMS; this was not required and did not gain credit. Candidates should be reminded to apply themselves to the specific question that is being asked. Credit was lost where candidates did not make it clear that a cool-down increases the flow of blood, and therefore oxygen, to the working muscles. Muscles will be receiving some oxygenated blood even without a cool-down.
- (e) (i) This question required candidates to show knowledge of two types of strength and apply that knowledge with a sporting example; often this was not adequately addressed. Although it was not specifically stated in the question, the explanation needed for each type of strength had to be clear and precise. The best answers used the definitions as an explanation. Some candidates failed to give practical examples and lost credit as a result.
  - (ii) Candidates need to be able to apply knowledge of sets, reps and resistance for the different types of strength, using recognised values. Some candidates wrote generally about the adaptations to training, which was not required.

- (f) Many candidates gave clear and detailed answers showing a good understanding of carbohydrate loading and its effect on glycogen stores; others were restricted to mentioning a diet high in carbohydrates. Candidates are reminded that repeating and rewording the question will not gain them any credit. For example, 'an endurance athlete would have more endurance because he has loaded his muscles with more carbohydrates' needs to be developed to say that the athlete would have an increased endurance capacity because he has increased stores of glycogen.

### **Section B: Psychology of Sports Performance**

#### **Question 2**

- (a) This question required clear definitions for aggression and assertion and many candidates were able to do this. Almost all candidates were able to suggest methods to reduce aggression in a performer.
- (b) This question was generally well answered.
- (c) This was also answered well and candidates who gave detailed descriptions of ways that leaders should act were given credit if appropriate and valid.
- (d) This question asked that each factor be explained, and good candidates did this successfully. Some candidates simply repeated the key words without any indication of understanding or explanation of the meaning. For example, performance accomplishments are previous successes and/or failures in a sporting situation, not just what the performer has accomplished.
- (e) Most candidates gave good explanations, including optimum arousal, focus on relevant cues, high self-confidence and low anxiety. Some candidates wrote in depth about the level of arousal being a bandwidth and being different for different activities and performers. This is all valid but only gained minimal credit as it focuses on only one aspect of the zone. The best answers gave a range of features.
- (f) Most candidates were able to identify the four components of Weiner's attribution model and give accurate examples for each.
- (g) The strongest candidates showed knowledge of each theory and applied that knowledge to sporting performance. Trait theory was understood best, but many candidates were unable to distinguish between the other two theories or give explanations of how they affected performance in sport. Candidates must avoid giving vague descriptions based on the names of each theory.

### **Section C: Olympic Games – A Global Perspective**

#### **Question 3**

- (a) There were some detailed answers showing excellent knowledge of the Ancient Olympic Games and their impact on early Modern Olympic Games. Many candidates scored well on this question.
- (b) Many candidates identified an increase in tourism and the cultural integration that brings a nation together as ways that the legacy benefits a host nation. Stronger candidates also highlighted greater participation in sport, more employment and the use of the Olympic village as housing. This question stretched and challenged all candidates.
- (c) This was generally well answered and many candidates covered methods used in China and USA, as well as referring to systems in place in their own country.
- (d) The most popular response was that high levels of security were needed at all venues and at the Olympic village. The best answers also highlighted the high cost of funding needed and the accreditation and background checks to be made on all athletes, officials and support staff before allocating passes. Simple statements that increased security was needed had to be linked to either the village or the venues to gain credit.
- (e) Candidates answers were characterised by vague descriptions of the voting process and few scored well on this question. The best answers identified that it was the city, (not the country) that submitted its bid to the IOC. This now takes place eight or nine years prior to the Olympics. They



also explained that there must be a detailed plan to support their bid and that it is the evaluation commission, not IOC members, who visit each city and then submit their report.

- (f) Candidates had to consider a range of factors that contribute to the importance of the Paralympic Games and many chose to outline its history and development, rather than addressing this question. The strongest candidates explained how the Games produce role models for people with disabilities, and showcase outstanding abilities and difficulties that have been overcome. This helps to get rid of stereotypes and encourages acceptance and tolerance of others, as well as promoting the idea of inclusion in society. Most candidates managed to give one or two valid answers, but this type of question that requires analysis and wider consideration is a feature of this section and candidates should be suitably prepared for them.

# PHYSICAL EDUCATION

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Paper 9396/32  
Written Paper

## Key Messages

The vast majority of candidates were well-prepared for the examination. Candidates managed their time well and recognised the differences between the command words in the questions.

## General Comments

There was a significant difference in the quality of the answers to the three areas of the syllabus. **Section A** and **section B** were generally well answered, but only the strongest candidates managed to score highly in **section C**. The best candidates showed detailed knowledge and understanding of each topic and were able to apply this knowledge to the specific needs of the question. Candidates are reminded that in **section C** there is a component of the course that requires discussion, analysis and evaluative comments about the future of the Olympic Games. Many candidates appear to struggle with this type of question. The ability to apply knowledge is a key discriminator and vital for success in this examination.

## Comments on Specific Questions

### **Section A: Exercise and Sport Physiology**

#### **Question 1**

- (a) This question was consistently well answered. It was pleasing to see that most candidates recognised that although the lactic acid system is predominant, there are also contributions from ATP splitting and the ATP-PC system to provide energy for the race.
- (b) Most candidates knew what OBLA stands for and identified exercise intensity and fitness level as key factors. Better candidates explained it in detail and gave a range of factors.
- (c) Candidates must be aware that when outlining the principle of specificity they must use an alternative word other than 'specific' to gain credit. For example training must be suitable or relevant to the sport. Most candidates were able to expand on their answer and recognised the need for four different examples of specificity to gain full credit.
- (d) Some candidates wrote in great detail about the causes of DOMS; this was not required and did not gain credit. Candidates should be reminded to apply themselves to the specific question that is being asked. Credit was lost where candidates did not make it clear that a cool-down increases the flow of blood, and therefore oxygen, to the working muscles. Muscles will be receiving some oxygenated blood even without a cool-down.
- (e) (i) This question required candidates to show knowledge of two types of strength and apply that knowledge with a sporting example; often this was not adequately addressed. Although it was not specifically stated in the question, the explanation needed for each type of strength had to be clear and precise. The best answers used the definitions as an explanation. Some candidates failed to give practical examples and lost credit as a result.
- (ii) Candidates need to be able to apply knowledge of sets, reps and resistance for the different types of strength, using recognised values. Some candidates wrote generally about the adaptations to training, which was not required.

- (f) Many candidates gave clear and detailed answers showing a good understanding of carbohydrate loading and its effect on glycogen stores; others were restricted to mentioning a diet high in carbohydrates. Candidates are reminded that repeating and rewording the question will not gain them any credit. For example, 'an endurance athlete would have more endurance because he has loaded his muscles with more carbohydrates' needs to be developed to say that the athlete would have an increased endurance capacity because he has increased stores of glycogen.

### **Section B: Psychology of Sports Performance**

#### **Question 2**

- (a) This question required clear definitions for aggression and assertion and many candidates were able to do this. Almost all candidates were able to suggest methods to reduce aggression in a performer.
- (b) This question was generally well answered.
- (c) This was also answered well and candidates who gave detailed descriptions of ways that leaders should act were given credit if appropriate and valid.
- (d) This question asked that each factor be explained, and good candidates did this successfully. Some candidates simply repeated the key words without any indication of understanding or explanation of the meaning. For example, performance accomplishments are previous successes and/or failures in a sporting situation, not just what the performer has accomplished.
- (e) Most candidates gave good explanations, including optimum arousal, focus on relevant cues, high self-confidence and low anxiety. Some candidates wrote in depth about the level of arousal being a bandwidth and being different for different activities and performers. This is all valid but only gained minimal credit as it focuses on only one aspect of the zone. The best answers gave a range of features.
- (f) Most candidates were able to identify the four components of Weiner's attribution model and give accurate examples for each.
- (g) The strongest candidates showed knowledge of each theory and applied that knowledge to sporting performance. Trait theory was understood best, but many candidates were unable to distinguish between the other two theories or give explanations of how they affected performance in sport. Candidates must avoid giving vague descriptions based on the names of each theory.

### **Section C: Olympic Games – A Global Perspective**

#### **Question 3**

- (a) There were some detailed answers showing excellent knowledge of the Ancient Olympic Games and their impact on early Modern Olympic Games. Many candidates scored well on this question.
- (b) Many candidates identified an increase in tourism and the cultural integration that brings a nation together as ways that the legacy benefits a host nation. Stronger candidates also highlighted greater participation in sport, more employment and the use of the Olympic village as housing. This question stretched and challenged all candidates.
- (c) This was generally well answered and many candidates covered methods used in China and USA, as well as referring to systems in place in their own country.
- (d) The most popular response was that high levels of security were needed at all venues and at the Olympic village. The best answers also highlighted the high cost of funding needed and the accreditation and background checks to be made on all athletes, officials and support staff before allocating passes. Simple statements that increased security was needed had to be linked to either the village or the venues to gain credit.
- (e) Candidates answers were characterised by vague descriptions of the voting process and few scored well on this question. The best answers identified that it was the city, (not the country) that submitted its bid to the IOC. This now takes place eight or nine years prior to the Olympics. They

also explained that there must be a detailed plan to support their bid and that it is the evaluation commission, not IOC members, who visit each city and then submit their report.

- (f) Candidates had to consider a range of factors that contribute to the importance of the Paralympic Games and many chose to outline its history and development, rather than addressing this question. The strongest candidates explained how the Games produce role models for people with disabilities, and showcase outstanding abilities and difficulties that have been overcome. This helps to get rid of stereotypes and encourages acceptance and tolerance of others, as well as promoting the idea of inclusion in society. Most candidates managed to give one or two valid answers, but this type of question that requires analysis and wider consideration is a feature of this section and candidates should be suitably prepared for them.

# PHYSICAL EDUCATION

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Paper 9396/33

Written Paper

## Key Messages

The vast majority of candidates were well-prepared for the examination. Candidates managed their time well and recognised the differences between the command words in the questions.

## General Comments

There was a significant difference in the quality of the answers to the three areas of the syllabus. **Section A** and **section B** were generally well answered, but only the strongest candidates managed to score highly in **section C**. The best candidates showed detailed knowledge and understanding of each topic and were able to apply this knowledge to the specific needs of the question. Candidates are reminded that in **section C** there is a component of the course that requires discussion, analysis and evaluative comments about the future of the Olympic Games. Many candidates appear to struggle with this type of question. The ability to apply knowledge is a key discriminator and vital for success in this examination.

## Comments on Specific Questions

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#### **Question 1**

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- (c) Candidates must be aware that when outlining the principle of specificity they must use an alternative word other than 'specific' to gain credit. For example training must be suitable or relevant to the sport. Most candidates were able to expand on their answer and recognised the need for four different examples of specificity to gain full credit.
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- (e) (i) This question required candidates to show knowledge of two types of strength and apply that knowledge with a sporting example; often this was not adequately addressed. Although it was not specifically stated in the question, the explanation needed for each type of strength had to be clear and precise. The best answers used the definitions as an explanation. Some candidates failed to give practical examples and lost credit as a result.
  - (ii) Candidates need to be able to apply knowledge of sets, reps and resistance for the different types of strength, using recognised values. Some candidates wrote generally about the adaptations to training, which was not required.

- (f) Many candidates gave clear and detailed answers showing a good understanding of carbohydrate loading and its effect on glycogen stores; others were restricted to mentioning a diet high in carbohydrates. Candidates are reminded that repeating and rewording the question will not gain them any credit. For example, 'an endurance athlete would have more endurance because he has loaded his muscles with more carbohydrates' needs to be developed to say that the athlete would have an increased endurance capacity because he has increased stores of glycogen.

### **Section B: Psychology of Sports Performance**

#### **Question 2**

- (a) This question required clear definitions for aggression and assertion and many candidates were able to do this. Almost all candidates were able to suggest methods to reduce aggression in a performer.
- (b) This question was generally well answered.
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- (d) This question asked that each factor be explained, and good candidates did this successfully. Some candidates simply repeated the key words without any indication of understanding or explanation of the meaning. For example, performance accomplishments are previous successes and/or failures in a sporting situation, not just what the performer has accomplished.
- (e) Most candidates gave good explanations, including optimum arousal, focus on relevant cues, high self-confidence and low anxiety. Some candidates wrote in depth about the level of arousal being a bandwidth and being different for different activities and performers. This is all valid but only gained minimal credit as it focuses on only one aspect of the zone. The best answers gave a range of features.
- (f) Most candidates were able to identify the four components of Weiner's attribution model and give accurate examples for each.
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### **Section C: Olympic Games – A Global Perspective**

#### **Question 3**

- (a) There were some detailed answers showing excellent knowledge of the Ancient Olympic Games and their impact on early Modern Olympic Games. Many candidates scored well on this question.
- (b) Many candidates identified an increase in tourism and the cultural integration that brings a nation together as ways that the legacy benefits a host nation. Stronger candidates also highlighted greater participation in sport, more employment and the use of the Olympic village as housing. This question stretched and challenged all candidates.
- (c) This was generally well answered and many candidates covered methods used in China and USA, as well as referring to systems in place in their own country.
- (d) The most popular response was that high levels of security were needed at all venues and at the Olympic village. The best answers also highlighted the high cost of funding needed and the accreditation and background checks to be made on all athletes, officials and support staff before allocating passes. Simple statements that increased security was needed had to be linked to either the village or the venues to gain credit.
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also explained that there must be a detailed plan to support their bid and that it is the evaluation commission, not IOC members, who visit each city and then submit their report.

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# PHYSICAL EDUCATION

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**Paper 9396/04**  
**A2 Coursework**

## **Key Messages**

1. Moderation in 2013 has been based on both the current, updated version of the Coursework Guidance Booklet and the previous version which was discontinued in 2013. Candidates have not been penalised or gained an advantage according to which version centres have used.
2. Centres who have used the new forms and assessment conditions have reported no problems with their use.
3. All Centres must use the new Guidelines Booklet and forms for assessment in 2014. Centres must read the detail of each activity before it is taught and before it is assessed.
4. New assessment forms exist for some activities.
5. A2 evidence can not be used at AS and vice versa.
6. Use of notes in the oral presentations is limited to those taken when observing the live performance. The filming should clearly show that candidates are only recoding their observations and not listing theoretical knowledge
7. Centres are asked to complete a dispatch form included in the back of the Guidelines Booklet to aid checking and use of coursework by Cambridge.

## **General Comments**

What is clear is the enthusiasm and effort that so many Centres and candidates demonstrate. Filming the evidence is difficult and time consuming. Many Centres do a very good job. The overall quality of teaching and candidate performance should be applauded. Some performances are clearly exceptional. Other candidates with lesser ability have worked very hard (sometimes over many years) to achieve a high standard in their activity. Teachers are obviously committed to maximising the ability of candidates.

## **Filmed Evidence**

The quality, quantity and type of evidence varies across the whole range. The majority of Centres produce good quality filmed evidence. In some cases this is excellent. Unfortunately there are also cases where the evidence is very poor. The best Centres clearly review, edit and then, most importantly, check the DVD before dispatch. Other Centres have submitted film that is blurred, where the camera points skywards or where it focuses on the wrong candidate.

The film should show the skill technique and the outcome (e.g. a shot in Basketball or a Tennis serve).

Centres are asked to consider the following issues before the DVD is dispatched.

Are the candidates clearly identified (e.g. by numbered bibs) and have the identifiers been written onto the assessment sheets (please remember that the Moderator will be totally unfamiliar with your candidates)? If unsure, ask someone who does not know the candidates to view the DVD to see if they can determine who is who from the assessment sheet provided.

Is candidate participation very frequent or is there a lot of time when they do not have contact with the ball?

Does the film show the best ability of the candidate(s)? For example, film of candidates in Rugby where there is little or no contact makes moderation very difficult.

Is the filming recent? It is pointless sending in film which is a few months old and writing to the Moderator to say that the candidates are now much better, as the Moderator can only assess on the evidence they see.



Filming of representative games is appropriate. Sometimes, however, the identification of candidates is very unclear. Also sometimes the candidate does very little 'in the game'.

### **Selected Activities**

Invasion games (mainly Hockey, Football, Netball, Basketball and Rugby), Badminton, Swimming and Track and Field are the activities that are submitted most frequently. Volleyball, Water Polo and Weight Training are also popular. The other activities that are available are used to a much lesser extent, but it is pleasing to see that nearly all the activities that are in the Guidelines Booklet are selected by some candidates.

### **Evaluating and Appreciating**

In common with other aspects of the Coursework these have varied considerably. From high quality, superbly presented, well considered work to just very short, very basic work.

Centres must read the syllabus and guidance notes before teaching and assessing this work.

The presentation should follow the format laid out in the Guidelines Booklet.

The presentation must start with the opening statement in the guidelines booklet read by the staff.

The observations must be of another person taking part in one of the two activities that the candidate has submitted as a practical activity.

Prompts, questions by staff, should be kept to a minimum and, where their use is necessary, marks should be adjusted accordingly.

Candidates must be aware of all the required elements.

The analysis, improvement methods, anatomical/physiological/psychological/learning/skill type knowledge should be applied to the observed performance. Candidates should not only state their observations but say WHY they believe that stated weaknesses and strengths are true and HOW improvement plans will work and HOW/WHY/WHEN they will be progressed.

The task instructions on pages 13 to 16 of the Coursework Guidelines Booklet provide a good outline of what is expected.

Adjustment to marks has been more frequent and more extensive for this aspect of the component than the others.

### **Assessment**

This has ranged from very accurate to a point where Centres have been over three levels too generous in their assessment of performance.

Some Centres will have marked to within a few marks of the criteria and some are very accurate. The moderation process will examine the evidence, aim to give as much credit to the candidate as possible and then arrive at a precise mark for the activity. If the Centre has internally standardised effectively then any difference between Centre marking and the moderation outcome should be consistent across all activities.

An average outcome (sometimes applied to just a limited range of marks) is then applied. Centres should note that for practical activities, positive or negative averages are doubled to reflect the fact that two activities contribute to the final mark.

Another problem is that candidates sometimes do not demonstrate their ability in sufficiently demanding conditions. So, for example, a Skier on an elementary run cannot be marked at a high level. Centres are asked to ensure that in their initial planning of an activity, opportunities to film candidates at a demand which demonstrates their ability are available and are planned and used.

## Double Evidence

Centres are not allowed to submit the same evidence to support AS and A2 marks where they have entered candidates for both examinations in the same year. Equally evidence submitted for AS should not be reused at A2.

## Comments on Specific Activities

The following activities have raised issues that Centres are asked to note for next year:

**Objectively marked activities need specific data to be recorded on the Assessment Forms and filmed evidence for the Critical Assessment aspect.**

<b>Cross Country:</b>	Candidates must run the specified distance and not one that suits the centre. This is to ensure that comparability between Centres can be maintained. (8k female, 10k male).
<b>Track and Field:</b>	Events must be filmed.
<b>Triathlon:</b>	Transition phases must be filmed. Times are required for the different disciplines.
<b>Combat Activities:</b>	Only Judo and Karate are permitted.
<b>Dance:</b>	Solo dances. Candidate must choreograph the dance. Group dance, or dance taken from a School production, is not permitted.
<b>Games Activities:</b>	Must include conditioned competitive practices (not simple drills) at a standard that places demand on the candidate.
<b>Cricket:</b>	Assessment on two out of three skill areas.
<b>Outdoor and Adventurous Activities:</b>	Prescribed minimum conditions now apply. Conditions to be entered onto assessment sheets.
<b>Hill Walking:</b>	Navigational skills must be filmed for each individual candidate.
<b>Rowing:</b>	Candidates should be assessed and filmed in sculls or pairs.
<b>Swimming:</b>	Strokes must be filmed.