

PHYSICAL EDUCATION

Paper 9396/11
Written Paper

General comments

Candidates performed well and produced some very comprehensive and detailed answers. A wide range of marks were achieved and candidates did not appear to have run out of time. Candidates had time to produce answers which reflected their knowledge. Candidates appeared to have performed better in **sections B** and **C** in which similar scores were achieved.

Stronger candidates were able to apply good examples to explain the theoretical concepts. The less able candidates found using examples more demanding.

In **section C** knowledge was required, but in many cases e.g., sport **(b)(ii)**, sponsorship **(c)**, and fair play **(e)** this knowledge then needed to be applied. The application of knowledge was not well shown in some cases.

Examination technique was generally good, but some candidates did answer parts of **section C** in list form which was not fully credited. Centres are reminded that points made in **section C** should be made using continuous prose as the answers do require a degree of explanation to demonstrate knowledge and understanding.

Technical language was used with confidence, which reflects good teaching and some independent study. Answers were, on the whole, well written.

Comments on specific questions

Question 1

- (a) (i)** Candidates were able to undertake a full movement analysis. Many candidates scored full marks on this section. The working muscles in the hip joint were a weakness. Detail of the individual muscles was required so gluteals and hamstrings did not justify full marks.
- (ii)** The more able candidates were able to give a full explanation of the role of the quadriceps during the landing phase of the vertical jump. Most understood that they act as a brake to stabilise the landing, but few were familiar with eccentric muscle action.
- (b)** The more able candidates scored highly on this question. The lesser able candidates were unclear as to the vascular shunt mechanism. Vasodilation and vasoconstriction were sometimes muddled. However the mark scheme was opened to allow the words open and closed. Knowledge of pre-capillary sphincters was required to achieve full marks. There was little understanding of the structure of arterioles and the smooth muscle content relating to vasodilation and vasoconstriction.
- (c)** Candidates found difficulty in describing the changes in velocity of the blood. Some misread the question and dealt with the pathway of blood travelling through the heart. There was limited knowledge of the reasons for the changes in the velocity of the blood through the systemic system. There was little or no knowledge of the cross sectional area of vessels in relation to velocity.
- (d)** Few candidates scored full marks in this section. Detailed knowledge of the cardiac control centre, as well as the role of baroreceptors, chemoreceptors and proprioceptors was required to score highly.
- (e)** The more able candidates knew the detail when exercising at altitude. This was a straight forward question but required detailed knowledge of partial pressures and diffusion gradients.

Question 2: Acquiring, Developing and Performing Movement Skills.

Some excellent scripts with candidates achieving maximum marks on many sections.

- (a) The majority of candidates achieved both marks.
- (b) This was generally well answered. For those candidates who were unsure in the identification of the phases, it was possible to achieve full marks using a description of the phase.
- (c) Some candidates simply indicated that intrinsic motivation was enjoyment / satisfaction and that extrinsic motivation was rewards/ trophies. This led to one mark in each section being scored.
- (d) A sketch graph was acceptable but required full labelling and/or a description. This was answered well and many candidates scored full marks.
- (e) The answer to this question was generally vague. Some candidates were not secure in their knowledge of motor programmes, and found difficulty in applying examples from sport to the answer.
- (f) Many scored full marks on this section. Some candidates muddled this with closed skills.
- (g) Many candidates knew the theory but did not apply their knowledge using examples from sport.

Section C:

Contemporary Studies

Answers should be written in continuous prose in this section to enable candidates to demonstrate knowledge and understanding of the subject area being examined. Providing simple lists without any explanations were not credited.

- (a) (i) Many candidates did not recognise that leisure is closely identified with socio-economic status. The upper classes have a right to leisure but to the working classes leisure is a privilege. Most candidates scored some marks in part (ii) recognising that leisure creates contented citizens and keeps them busy and therefore out of trouble. In part (iii) there were some very thorough answers in this section.
- (b) The characteristics of sport were well known, but some candidates were unable to apply this knowledge fully to the desirable and undesirable aspects of sport.
- (c) Most candidates recognised that sponsors can control sport and the performer, and many recognised the ease with which sponsorship can be withdrawn.
- (d) Candidates are very knowledgeable about schemes and campaigns which encourage participation. Many scored highly on this section. All worked through examples. In those examples which lacked a good structure marks were credited for stating the negative aspects e.g. more coaches are needed.
- (e) Many could access this question by discussing the 'win at all costs' ethic and suggesting that the need to win encouraged cheating. More depth was required in order to score full marks. Detail about the high rewards / wealth available, and the pressure from governments, owners and sponsors was required to score full marks.

PHYSICAL EDUCATION

Paper 9396/12

Written Paper

General comments

Candidates performed well and produced some very comprehensive and detailed answers. A wide range of marks were achieved and candidates did not appear to have run out of time. Candidates had time to produce answers which reflected their knowledge. Candidates appeared to have performed better in **sections B** and **C** in which similar scores were achieved.

Stronger candidates were able to apply good examples to explain the theoretical concepts. The less able candidates found using examples more demanding.

In **section C** knowledge was required, but in many cases e.g., sport **(b)(ii)**, sponsorship **(c)**, and fair play **(e)** this knowledge then needed to be applied. The application of knowledge was not well shown in some cases.

Examination technique was generally good, but some candidates did answer parts of **section C** in list form which was not fully credited. Centres are reminded that points made in **section C** should be made using continuous prose as the answers do require a degree of explanation to demonstrate knowledge and understanding.

Technical language was used with confidence, which reflects good teaching and some independent study. Answers were, on the whole, well written.

Comments on specific questions

Question 1

- (a) (i)** Candidates were able to undertake a full movement analysis. Many candidates scored full marks on this section. The working muscles in the hip joint were a weakness. Detail of the individual muscles was required so gluteals and hamstrings did not justify full marks.
- (ii)** The more able candidates were able to give a full explanation of the role of the quadriceps during the landing phase of the vertical jump. Most understood that they act as a brake to stabilise the landing, but few were familiar with eccentric muscle action.
- (b)** The more able candidates scored highly on this question. The lesser able candidates were unclear as to the vascular shunt mechanism. Vasodilation and vasoconstriction were sometimes muddled. However the mark scheme was opened to allow the words open and closed. Knowledge of pre-capillary sphincters was required to achieve full marks. There was little understanding of the structure of arterioles and the smooth muscle content relating to vasodilation and vasoconstriction.
- (c)** Candidates found difficulty in describing the changes in velocity of the blood. Some misread the question and dealt with the pathway of blood travelling through the heart. There was limited knowledge of the reasons for the changes in the velocity of the blood through the systemic system. There was little or no knowledge of the cross sectional area of vessels in relation to velocity.
- (d)** Few candidates scored full marks in this section. Detailed knowledge of the cardiac control centre, as well as the role of baroreceptors, chemoreceptors and proprioceptors was required to score highly.
- (e)** The more able candidates knew the detail when exercising at altitude. This was a straight forward question but required detailed knowledge of partial pressures and diffusion gradients.

Question 2: Acquiring, Developing and Performing Movement Skills.

Some excellent scripts with candidates achieving maximum marks on many sections.

- (a) The majority of candidates achieved both marks.
- (b) This was generally well answered. For those candidates who were unsure in the identification of the phases, it was possible to achieve full marks using a description of the phase.
- (c) Some candidates simply indicated that intrinsic motivation was enjoyment / satisfaction and that extrinsic motivation was rewards/ trophies. This led to one mark in each section being scored.
- (d) A sketch graph was acceptable but required full labelling and/or a description. This was answered well and many candidates scored full marks.
- (e) The answer to this question was generally vague. Some candidates were not secure in their knowledge of motor programmes, and found difficulty in applying examples from sport to the answer.
- (f) Many scored full marks on this section. Some candidates muddled this with closed skills.
- (g) Many candidates knew the theory but did not apply their knowledge using examples from sport.

Section C:

Contemporary Studies

Answers should be written in continuous prose in this section to enable candidates to demonstrate knowledge and understanding of the subject area being examined. Providing simple lists without any explanations were not credited.

- (a) (i) Many candidates did not recognise that leisure is closely identified with socio-economic status. The upper classes have a right to leisure but to the working classes leisure is a privilege. Most candidates scored some marks in part (ii) recognising that leisure creates contented citizens and keeps them busy and therefore out of trouble. In part (iii) there were some very thorough answers in this section.
- (b) The characteristics of sport were well known, but some candidates were unable to apply this knowledge fully to the desirable and undesirable aspects of sport.
- (c) Most candidates recognised that sponsors can control sport and the performer, and many recognised the ease with which sponsorship can be withdrawn.
- (d) Candidates are very knowledgeable about schemes and campaigns which encourage participation. Many scored highly on this section. All worked through examples. In those examples which lacked a good structure marks were credited for stating the negative aspects e.g. more coaches are needed.
- (e) Many could access this question by discussing the 'win at all costs' ethic and suggesting that the need to win encouraged cheating. More depth was required in order to score full marks. Detail about the high rewards / wealth available, and the pressure from governments, owners and sponsors was required to score full marks.

PHYSICAL EDUCATION

Paper 9396/13
Written Paper

General comments

Candidates performed extremely well and produced some very comprehensive and detailed scripts. A wide range of marks were achieved and candidates did not appear to have run out of time. Candidates had time to produce answers which reflected their knowledge. Candidates performed better in **sections B** and **C** in which similar scores were achieved.

Stronger candidates were able to apply good examples to explain the theoretical concepts. The less able candidates found using examples more demanding.

Examination technique was generally good, but some candidates did answer parts of **section C** in list form which was not fully credited. Centres are reminded that points made in **section C** should be made using continuous prose as the answers do require a degree of explanation to demonstrate knowledge and understanding.

Technical language was used with confidence, which reflects good teaching and some independent study. Answers were well written with a high standard of spelling and grammar.

The scripts of candidates who did not score highly lacked detailed knowledge.

Comments on specific questions

Question 1

This question was the least well answered, of the three questions on the paper. A detailed knowledge of the syllabus areas was required in all sections.

- (a) There was some confusion as to which characteristics of fast glycolytic muscle fibre type were structural and which were functional, but there was a wide ranging mark scheme which enabled most candidates to score highly. Large and pale in colour did not merit marks.
- (b) Both the rotator cuff and the multifidus muscles feature in the syllabus but there was little knowledge of either the positioning or the role of either muscle. Guess work suggested that the rotator cuff muscle was situated in the wrist and so contributed to spin bowling. Candidates were required to apply knowledge of the rotator cuff muscle relating to the stability of the shoulder joint in high impact sports and those with a vigorous arm action. The multifidus muscle deals with core stability of the lower spine. Candidates needed to relate sports which need to absorb forces through the lower back
- (c) Most candidates were aware that at point A, adrenalin is released and acts on the SA node. Detail of chemoreceptors, baroreceptors and proprioceptors which send messages to the cardiac control centre/medulla oblongata was needed to gain marks for point B. Point C was well answered although the word plateau was not accepted without an explanation.
- (d) Those candidates who dealt with the conduction system of the heart answered this well. Some candidates confused the conduction system with the pathway of blood through the heart, and so did not score very well.
- (e) This was a reasonably straight forward question. The word dissolve was needed as part of the full answer e.g. O₂ dissolves in the blood plasma in order to gain full marks.

- (f) This section proved to be a differentiator within this question. Detail of pH, diffusion gradients, dissociation of O₂ and CO₂ from haemoglobin was needed. Some candidates did display this level of knowledge.

Question 2

This question was well answered by the majority of candidates. The markscheme had been expanded to allow abilities required for tennis and to allow any different abilities given for hockey.

- (a) Most candidates identified abilities required for both games, and so scored highly.
- (b)(i) This was well answered. Candidates were able to apply suitable examples to earn four marks.
- (ii) This required a good understanding of transfer and was shown by the majority of candidates.
- (c) Most candidates understood the meaning of the SR bond and could give a suitable example. However, there were limited/vague answers on how it could be strengthened. Knowledgeable candidates gave details of Thorndike's Laws and were able to apply these using practical examples.
- (d) Many candidates misread the question and embarked on a description of different skills. The question clearly asked for the identification of a skill and to explain it using the two identified continua. Care and understanding were needed in the selection of the motor skill to classify. Candidates who did this found no difficulty in scoring highly in this section.
- (e) There was some confusion between the cognitive theory of learning and the cognitive phase of learning. Those candidates who explained the cognitive theory of learning knew that the skill was learned as a whole and related to the teachings of Gestalt.
- (f) Closed loop control caused some problems but most candidates knew that it occurs on two levels, Level 1 being sub-conscious and Level 3 being conscious. Diagrams were used and credited if they showed feedback.

Question 3

Answers should be written in continuous prose in this section to enable candidates to demonstrate knowledge and understanding of the subject area being examined. Providing simple lists without any explanations were not credited. This was the case in (a) and (b).

Some sections of this question allowed candidates to show their considerable knowledge about the issues which affect sport such as violence, sportsmanship, the media and commerce.

The question was answered well.

- (a) Candidates showed a thorough knowledge of both play and recreation. The similarities gained maximum marks but the differences were not so well constructed.
- (b) Candidates enjoyed relating the importance of Physical Education. This question was well answered with most candidates scoring maximum marks.
- (c) This question was answered well and health and fitness benefits were covered as well as giving the fact that enjoyment is gained from participation.
- (d) Candidates were able to discuss violence in sport, which was not required as part of the answer, but were limited in suggestions as how to reduce violence, apart from lengthy ideas on banning, fining and the use of other punishments.

- (e) (i)** Sportsmanship was well understood, but many candidates did not understand the meaning of gamesmanship.
- (ii)** The application of the knowledge of sportsmanship caused some difficulties. Only the most able candidates scored full marks on this section. Some gained marks from the high rewards available for winning.
- (f)** This was an opportunity for the more able candidate to write at length about the effect of the media and commerce in sport. The more able candidates recognised that there are both negative and positive effects and earned marks for a full description of both. The less able gained some marks generally by some knowledge about the changes made to sports to accommodate the media.

PHYSICAL EDUCATION

Paper 9396/02
AS Coursework

General comments

All Centres have worked very hard to produce very thorough assessments. Most Centres have followed the coursework guidelines and the paperwork accompanying the assessment was good. The DVDs produced on the whole were excellent with some outstanding footage of candidates.

Some Centres included footage of candidates who were not entered for the examination. The only time other candidates should be needed is "to make up the numbers" for the competitive situation. If this is the case then please focus on the examination candidates during the filming.

The quality of identification of candidates was generally good. The most successful Centres were those where the candidates wore clearly numbered tee shirts/ sports shirts, and wore the same number throughout. It is difficult as a Moderator to look for the player wearing red boots amongst a competitive situation filmed at a great distance.

Approximately three to five minutes of film per candidate per activity is generally necessary to make judgements.

It is very helpful as a Moderator to receive a timetable / notes of the video evidence contained in the DVD and a list of the candidates in order of filming.

Most Centres used the criteria well and assessed their candidates with considerable accuracy. Particularly, those Centres which have previously entered candidates made very sound accurate assessments. There is evidence of excellent work which has been produced by candidates, but also of excellent teaching and preparation of the candidates.

However the banded criteria in the coursework guidelines are not always used well. Some Centres created their own marking scheme based on the banded criteria in the coursework guidelines. The criteria are intended to be used as a whole and not to be broken down into sections. To break down the criteria may disadvantage candidates.

There is a tendency in some Centres to use the 30/30 as a bench mark. This means that some candidates who are obviously in the top band are given a mark of 26/27/28/29 when in fact they are probably 30/30 along with the outstanding candidate. The 30/30 mark should not be based on the level of the best candidate but on the actual criteria in the guidelines being met. Centres should ensure that girls are assessed on their own merit and not in comparison to the boys.

There has been a good range of activities used for assessment. It is good to see that Centres offer activities such as life saving, personal survival, and mountain/hill walking from which the candidates gain valuable knowledge and experience from an educational point of view. There is evidence of high quality of work and teaching throughout the assessment of the activities.

Action plans for this new examination should be more robust than the previous 8666 syllabus. Please keep in mind that it is worth 30 marks i.e. $\frac{1}{3}^{\text{rd}}$ of the component.

Some of the work produced has been excellent. The most successful have undertaken some pre-testing of fitness, skills and tactical ploys. Known accepted tests have been used, but also some devised by the candidates. This has become an important part of the action plan. Post-testing can then determine progress or otherwise, and help with the final evaluation of the plan. It is therefore important that there is an accurate assessment of strengths and weaknesses of performance so that the action plan can be formed.

Staff have generally assessed the action plans accurately. However, some Centres devised their own marking schemes for this area from the guidelines. This is not appropriate as it should be marked as a whole plan using the banded criteria.

PHYSICAL EDUCATION

Paper 9396/31
Written Paper

General comments

This is the first year that the A2 Written Paper has been examined and only a small number of Centres were entered. A wide range of marks were achieved, however many candidates performed well with detailed scripts often addressing each question well. Most candidates did not appear to have run out of time and provided detailed responses. Candidates achieved similar scores on **Section A** and **Section C** but seemed to perform slightly better on **Section B**. The more able candidates were able to explain their answers fully and kept to the requirements of the question. Many candidates at times wrote irrelevant material that did not answer the question but merely gave background or extra information that the question did not require. Many candidates used appropriate technical vocabulary to answer their questions and most candidates wrote with a high standard of spelling, grammar and punctuation. Most scripts revealed that candidates had been well prepared by their Centres for this examination and had been taught not only the breadth of the syllabus but also at the depth required. A few candidates were weaker in one topic area but the majority showed a good range of knowledge and understanding for all three areas.

Comments on Specific Questions

Section A: Exercise and Sport Physiology

Question 1

- (a)
- (i) Most candidates wrote a comprehensive and accurate answer identifying both the exothermic and the endothermic reactions as well as details of the controlling enzyme.
 - (ii) The vast majority of candidates were awarded full credit as they identified two advantages and two disadvantages of the alactic energy system.
 - (iii) This was one of the least well answered questions with many candidates giving a type of training rather than a method of performance enhancement. Some gave soda loading as a response but this is not appropriate as an example of a performance enhancement that is used to increase the threshold of the alactacid energy system.
- (b)
- (i) Most candidates could give a description of plyometric training but only the more able candidates described it fully. Some candidates misunderstood the nature of plyometric training and described inappropriate training methods such as weight training.
 - (ii) Those that could give a good description of plyometric training often then followed this with a good explanation of why this training method is beneficial to sprint athletes. Most identified the relevance of training for power in sprinting.
- (c) This was answered extremely well by the vast majority of candidates who could discuss in detail the physiological benefits of a warm-up.
- (d)
- (i) This was answered well by some candidates who described each stage of the PNF training method. It was apparent that some candidates confused this type of flexibility training with other types.

- (ii) This question discriminated well between those that could describe the training method and those that could not only describe but also explain well the physiological adaptations to muscles and connective tissue.

Section B: Psychology of Sports Performance

Question 2

- (a) Most candidates could describe the personality characteristics that encourage a 'need to achieve' personality but only the more able candidates also described the situational aspects.
- (b) Most candidates answered this extremely well and showed a good knowledge of group dynamics. Some candidates wasted precious time by describing in detail the dynamics of group formation and then spent only a small amount of time actually answering the question set.
- (c) Most candidates were awarded full credit for this question. Only a few did not give any practical examples to illustrate the effectiveness of goal setting.
- (d) Some candidates wrote a comprehensive account of a variety of theories that seek to explain aggressive behaviour. Other candidates wrote too much on one or two theories and did not expand enough on these to gain the full credit available. Others got sidetracked and explained the differences between aggression and assertion or the role of instrumental question. Candidates are reminded to read each question carefully to ascertain the exact requirements of each question.
- (e) Most candidates answered this very well and showed that they knew the difference between cognitive and somatic anxiety.
- (f) An excellent response from most candidates, many of whom achieved full credit for this question.
- (g) This question proved to be one of the most difficult on the paper with candidates not getting to grips with Vealey's model. The successful candidates worked through the model systematically and explained each element and how it affected self-confidence. Centres are reminded that theoretical models identified in the syllabus may be used as source material for candidates to explain.

Section C: Olympic Games: A global Perspective

Question 3

- (a) This question is a wide-ranging one and candidates were often able to draw inspiration from recent Olympic Games and how they resulted in friendships being forged and a sense of unity that often exists. Most candidates performed well on this question.
- (b) Most candidates could write something that was worthy in response to this question but often not at the depth required to attract the full credit available. Candidates are reminded to take note of the marks allocated to assess how much should be written. In this case more than quoting some Olympic demonstrations and boycotts is necessary to be awarded full credit. The more able candidates wrote a discussion rather than merely a description and looked at the impact of politics on the Olympics with more than one perspective.
- (c) A well answered question with candidates well prepared to respond to describing the role of women in the Olympic Games. Many candidates knew good detail of the ancient form of the Olympics.
- (d) This question proved to be the hardest for candidates in this section. Many knew something about how the USA and China nurture talent for the Olympics but many did not give enough detail to be awarded the full credit available. The more able candidates wrote fully and with a balanced approach showing an equal amount of knowledge about the USA and China.
- (e) This was answered very well by the majority of candidates with many being awarded full credit.

PHYSICAL EDUCATION

Paper 9396/32

Written Paper

General comments

This is the first year that the A2 Written Paper has been examined and only a small number of Centres were entered. A wide range of marks were achieved, however many candidates performed well with detailed scripts often addressing each question well. Most candidates did not appear to have run out of time and provided detailed responses. Candidates achieved similar scores on **Section A** and **Section C** but seemed to perform slightly better on **Section B**. The more able candidates were able to explain their answers fully and kept to the requirements of the question. Many candidates at times wrote irrelevant material that did not answer the question but merely gave background or extra information that the question did not require. Many candidates used appropriate technical vocabulary to answer their questions and most candidates wrote with a high standard of spelling, grammar and punctuation. Most scripts revealed that candidates had been well prepared by their Centres for this examination and had been taught not only the breadth of the syllabus but also at the depth required. A few candidates were weaker in one topic area but the majority showed a good range of knowledge and understanding for all three areas.

Comments on Specific Questions

Section A: Exercise and Sport Physiology

Question 1

- (a)
- (i) Most candidates wrote a comprehensive and accurate answer identifying both the exothermic and the endothermic reactions as well as details of the controlling enzyme.
 - (ii) The vast majority of candidates were awarded full credit as they identified two advantages and two disadvantages of the alactic energy system.
 - (iii) This was one of the least well answered questions with many candidates giving a type of training rather than a method of performance enhancement. Some gave soda loading as a response but this is not appropriate as an example of a performance enhancement that is used to increase the threshold of the alactacid energy system.
- (b)
- (i) Most candidates could give a description of plyometric training but only the more able candidates described it fully. Some candidates misunderstood the nature of plyometric training and described inappropriate training methods such as weight training.
 - (ii) Those that could give a good description of plyometric training often then followed this with a good explanation of why this training method is beneficial to sprint athletes. Most identified the relevance of training for power in sprinting.
- (c) This was answered extremely well by the vast majority of candidates who could discuss in detail the physiological benefits of a warm-up.
- (d)
- (i) This was answered well by some candidates who described each stage of the PNF training method. It was apparent that some candidates confused this type of flexibility training with other types.

