

PHYSICAL EDUCATION

Paper 9396/02
AS Level Coursework

Key messages

- Some centres produced Action Plans that were entirely fitness based. There should be a balance between skill, fitness, background information and improvement plans.
- Candidate identification was an issue for some centres. Candidates must be identified by clear numbers (or letters) on the front and back of shirts. Some centres used other methods instead, such as colour of shirt, or just a verbal introduction which was often not sufficient.
- Centres should place candidates in an environment that provides sufficient demand to allow assessment at AS Level. If candidates are asked to complete tasks in a situation of low demand they are unlikely to access higher marks.

General comments

There were some very strong performances evident. Some weaker candidates had clearly worked hard to achieve a good standard in their activity. However, a few candidates submitted activities in which they were beginners. The expected standard at AS Level requires candidates to be able to demonstrate a good level of proficiency.

Filmed evidence

The quality, quantity and type of evidence varied considerably. The majority of centres produced good-quality filmed evidence. The number of cases where it was inadequate was low. Many centres had reviewed, selected, edited and then checked evidence the DVD before dispatch. For a few centres the film was blurred, pointed skywards, filmed from too great a distance or focused on the wrong candidate. Centres are reminded that they must review the final DVD before it is submitted. DVD evidence should not contain a series of very short clips. A single DVD, with chapters for each activity and a menu is the ideal form of presentation. There was some filmed evidence with very large black backgrounds and only a small picture. This is a format issue and centres are asked to review their evidence before submission.

Centres should submit all work on a single DVD where possible. Filming should be by activity and not presented by individual candidate, except when there is only one candidate for the activity or the activity is an individual activity (e.g. Gymnastics) or candidates' abilities are very different. The film should show both the technique of the skill and the outcome (e.g. a shot in basketball or a tennis serve). The use of a tripod can improve film quality.

Centres are asked to consider the following issues before the DVD is dispatched: Are the candidates clearly identified? Have the candidate identifiers been written onto the assessment sheets? 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)?, e.g. footage of candidates in Rugby where there is little or no contact can result in evidence that disadvantages the candidate.

Selected activities

Invasion games (mainly Hockey, Football, Netball, Basketball and Rugby), Badminton, Tennis, Swimming, Cross Country and Track and Field were the most frequently seen activities. Dance, Hill Walking, Volleyball, Water Polo and Weight Training were also popular. The other activities that are available were offered less frequently. Outdoor and Adventurous activities were generally limited to Hill Walking and Orienteering.

Action Plans

Some Action Plans were of high quality and were superbly presented with well-considered work while others consisted of just one side of very basic work.

Work should be specific to an activity and should address all factors of the performance, not just fitness. The work should include all of the following areas: identification of strengths and weaknesses and the rationale for the judgement, which leads to clear and realistic (SMARTER) goals, which in turn leads to the analysis of technique and fitness elements. Detailed plans to bring about improvement must be provided which include detailed practices, the principles of training (particularly SPOR and FIT) and a week-by-week plan. Finally, the plan should be evaluated and this should include some quantitative results. The task instructions in the Coursework Guidelines Booklet provide a good outline of what is expected. The Action Plan must be one of the candidate's own practical activities and must aim to improve the candidate's performance.

Action plans should have a front cover which shows the mark, candidate name, candidate number and the activity which is being improved. In this session, some work was not very activity specific. Other work identified strengths and weaknesses but then the improvement plan did not refer back to the identified issues. Not all aspects need to be included in the plan, especially if some are focused on in depth. Some training sessions were excellent, whereas others were only repeated twice a week and contained content that lasted a maximum of ten minutes. Centres should note that Action Plans must not just be a record of participation in an activity, either in club training session or lessons. Action Plans cannot be undertaken in Weight Training. Activities must allow candidates to improve aspects of skill; candidates focusing on invasion games generally produced better plans.

Assessment

There were only a few centres whose marks differed from the expected standard of assessment significantly.

Some candidates did 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.

In Weight Training this year most centres submitted logs. Some of the logs did not follow a logical pattern. On occasions, the weight being used for training varied between exercises from 95% to 40% for the same candidate. Centres needed to present evidence that the candidate had followed a programme of weight training that had a specific purpose and included a wide range of weight training stations. The Weight Training Individual Candidate Record Form should record a candidate's participation, and this should then be used as the basis of assessment. This is available in the current coursework guidelines. This form must be submitted with coursework.

Comments on specific activities

Athletics

Several examples/attempts (particularly in field events) should be filmed.

Cross country

Candidates must run the specified distance, (4 km female, 5 km male), and not a distance selected by the centre. This is to ensure that comparability between centres can be maintained.

Weight training

Logs must be used and then marks submitted on a Centre Rank Order sheet.

Combat Activities

Only Judo and Karate are permitted.

Dance

Three solo dances are required and candidates must choreograph the dances. Group dances or dances taken from a school production are not permitted.

Games activities

These must include conditioned competitive practices (not simple drills) at a standard that places demand on the candidate.

Cricket

Assessment should be carried out on two out of three skill areas.

Outdoor and Adventurous activities

Prescribed minimum conditions apply. Conditions must be entered onto assessment sheets.

Hill Walking – Navigational skills must be filmed for each individual candidate.

Rowing – Candidates should be assessed and filmed in sculls or pairs.

Orienteering – Navigational skills must be filmed. Assessment must be on a graded course.

Swimming

Swimming strokes must be filmed.

PHYSICAL EDUCATION

Paper 9396/04
A Level Coursework

Key messages

- The use of notes in the oral presentations must be limited to those taken when observing the live performance. The filming should show that candidates are only recording their observations and not listing theoretical knowledge.
- Candidates must watch a live performance and not a filmed performance.
- Synoptic talks must include the theoretical disciplines. Some talks lasted less than 10 minutes and some centres should consult the guidelines and include the opening statement.
- Hill Walking evidence varies in quality between centres. Some centres provided detailed evidence. Hill Walking must be filmed and the content should clearly show advanced skills.

General comments

At some centres the level of demand in Games activities was not at A-Level standard in some cases. Simple unopposed skills/drills are not suitable evidence at A-level standard. Candidates must be assessed in a competitive situation, which is a feature that distinguishes A Level from AS Level. Centres should place candidates in an environment that provides sufficient demand to allow assessment at A Level. If candidates are asked to complete tasks in a situation of low demand then they cannot access higher marks, as a result simple isolated drills should not be demonstrated by candidates.

If centres are entering candidates for AS and A Level in the same series, they must submit completely separate coursework for each component (02 and 04). The type of evidence that is required is different and each component may be moderated by a different moderator.

Overall, centres provided good filmed evidence. The overall quality of teaching and candidate performance was clear and some performances were very strong.

Filmed evidence

The quality, quantity and type of evidence varied across centres and the range of activities. The majority of centres produced good filmed evidence. Unfortunately, there were also cases where the evidence was poor. Film angles must enable the skill and the outcome (e.g. where the ball lands) to be seen. A few centres filmed the skill from either a distance that was too close or from an incorrect angle.

Where candidates are participating in the same activity, they should be filmed together where possible. Evidence should be presented by activity rather than by candidate. So, for example, several badminton players should be filmed together unless they are of very different abilities.

Common problems associated with filmed evidence were that the format of the filming or copying created footage with a small image surrounded by a large black background or a lack of sound. Other issues were a lack of tripod use resulting in camera shake, the camera angle not allowing the skill and the outcome to be viewed, having too many participants in the shot (e.g. candidates unidentified in a rugby match) or the distance of the camera from the action. This was sometimes either too far for individual candidates to be identified or too close for the context of the game to be appreciated.

Centres are asked to consider the following issues before the DVD is dispatched: Are the candidates clearly identified? Have the identifiers been written onto the assessment sheets? 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)?

Filming of representative games is appropriate. Identification of candidates is more difficult in formal game situations and it is essential that centres are able to give clear indicators.

Centres are reminded that the responsibility for producing the evidence lies with centre staff and this should not be delegated to candidates. The best centres had clearly reviewed, selected, edited and then, most importantly, checked the DVD before dispatch. DVD content should be presented by activity rather than by candidate. Similar candidates should be filmed together. DVD evidence should not contain short clips. A single DVD with chapters for each activity and a menu is the ideal form of presentation. Where chapters or sectioning are used the film should be continuous and not sub-divided for each candidate.

Candidate identification

While candidates are well known to centre staff, the moderator requires very clear identification from all angles in order to identify candidates. Candidates must be identified by large numbered or lettered bibs that can easily be seen at a distance. These must be on the front and back. The identifier must be written onto the first column on the Rank Order Assessment forms. Please do not write DVD 1 or use what the candidate is wearing, e.g. blue socks/yellow boots. Please do not introduce candidates on the film or list their names.

Selected activities

Invasion games (mainly Hockey, Football, Netball, Basketball and Rugby), Badminton, Competitive Swimming and Track and Field Athletics were the activities that were submitted most frequently. Volleyball and Water Polo were also popular. The other activities that are available were used to a lesser extent but nearly all the activities that are in the Guidelines Booklet were selected by some candidates. Outdoor and Adventurous activities were mainly limited to Hill Walking with some Orienteering this year.

Evaluating and Appreciating

In common with other aspects of the coursework these have varied considerably from high-quality, superbly presented, well-considered work to very short and very basic work. However, most centres produced work which is of suitable length this year.

The filming of the talks in a formal environment was generally suitable. Most centres had used the opening statement in the Guidelines Booklet. However, it should be noted that the performance must be live and the talk must take place immediately after the observation. Only notes of the observation are permitted and this should be made obvious on the film.

The presentation should follow the format laid out and 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. It is useful when the observed performance is included. However, in team games the performer must be clearly identified. Prompts or questions by staff should be kept to a minimum and where their use is necessary marks should be adjusted accordingly. The analysis, improvement methods, anatomical/physiological/psychological/learning/skill type knowledge should be applied to the observed performance. Candidates should state their observations and should also say why they believe that the stated weaknesses and strengths are true, how improvement plans will work and how, when and why they will be progressed. The task instructions in the booklet provide a good outline of what is expected.

Standard of practical assessment

Many centres marked to within a few marks of the criteria and were generally accurate. However in a number of cases, significant scaling was necessary to bring marks to the required level.

Level of demand

The level of demand was an issue in some centres. A much weaker opponent in Badminton, staged opposition in Judo, light winds/calm water in Sailing, easy contact situations in Rugby are all examples of insufficient demand at A-level standard. 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 that demonstrates their ability are available and are planned and used. In particular, the level of demand in Games this year was not at an A-level standard in some centres.

Double use of evidence

Centres are **not** allowed to submit the same evidence to support component 02 and component 04.

Comments on specific activities

Objectively marked activities need specific data to be recorded on the assessment forms and filmed evidence for the critical assessment aspect.

Cross Country Running

Candidates must run the specified distance (8 km for females and 10 km for males) and not one that is chosen by the centre. This is to ensure that there is comparability between centres.

Dance

Solo dances are required and candidates must choreograph the dances. Neither group dance nor a dance taken from a school production is permitted.

Outdoor and Adventurous activities

Prescribed minimum conditions apply. Conditions need to be entered onto assessment sheets.

Hill Walking

Navigational skills must be filmed for each individual candidate. It is not sufficient to just submit a log. Group numbers for the expedition should ideally be four. Logs should give information/evidence that allows centres and moderators to award marks and differentiate.

Rowing

Candidates should be assessed and filmed in sculls or pairs.

Swimming

Strokes must be filmed.

PHYSICAL EDUCATION

Paper 9396/11
Written Paper

Key messages

- Candidates should try to divide their time evenly between the three sections of the question paper.
- Candidates should take note of the command word being used and should ensure they answer the question being asked.

General comments

The standard of responses varied considerably. There was evidence of good understanding in some answers in **Section C**. Responses to questions in **Section A** and **Section B** were often not as strong. Some candidates gave very general and superficial answers about the topic in some questions. There were examples of no response being provided by some candidates for several questions suggesting a lack of knowledge of the syllabus content. There was also a tendency for weaker candidates to provide a single explanation to questions that had mark allocations that suggested the need for multiple points.

Comments on specific questions

Section A: Applied anatomy and physiology

Question 1

- (a) Descriptions of the action of antagonistic pairs of muscles at the elbow were generally not strong and showed a lack of depth of knowledge. Many candidates were able to describe the idea of one muscle contracting and another relaxing, but the naming of the agonist and antagonist and the movements was typically limited to answers from the strongest candidates.
- (b)(i) Only the stronger candidates knew the difference between isokinetic and isometric contractions.
- (ii) The majority of candidates were unable to clearly differentiate between concentric and eccentric contractions.
- (c) Candidates usually identified item 1 and occasionally items 2 and 5. Items 3 and 4 were less frequently identified.
- (d)(i) Definitions of cardiac output and stroke volume were generally accurate, although there was occasional confusion of cardiac output with heart rate. The relationship between the terms was well-known.
- (ii) Stronger candidates answered this question well.
- (iii) Many candidates limited their response to suggesting that an increase in heart rate causes the increase in stroke volume during exercise, rather than describing Starling's Law and the relationship between venous return and stroke volume.

- (e) Candidates' knowledge of oxygen transport was generally limited to the formation of oxyhaemoglobin. Carbon dioxide transport was largely unaddressed or the question was simply repeated.
- (f) (i) Many candidates were able to suggest that breathing rate increases during exercise, but only stronger candidates were able to accurately describe how depth of breathing is increased through the action of additional muscle contractions.

(ii) Few candidates were able to describe the beneficial effects of endurance training. Most limited themselves to superficial ideas concerning the body being fitter or better, rather than describing specific physiological changes to the cardio-respiratory system.

Section B: Acquiring, developing and performing movement skills

Question 2

- (a) Many candidates gave good descriptions and examples of open skills and serial skills. Complex skills were often described simply as being complex. High organisation skills were not generally described clearly.
- (b) (i) The majority of candidates gave a definition of ability.

(ii) Most candidates knew an example of gross motor ability but fewer were able to provide a suitable example of psychomotor abilities, often describing skills instead.
- (c) Many candidates were unable to explain the term.
- (d) Schema theory was only known by stronger candidates, although others knew the idea of recall and recognition schema. The use of schema to modify motor programmes was rarely discussed.
- (e) Explanations of the stages in the information processing model were not clearly understood by most candidates, with most candidates giving superficial descriptions of the terms 'perception', 'translation' and 'effect'.
- (f) (i) This question was answered well by most candidates with the ideas of correcting and reinforcing actions being popular responses.

(ii) Knowledge of performance and knowledge of results were often not clearly explained. However, stronger candidates were able to give examples to support their explanations.

Section C: Contemporary studies in physical education and sport

Question 3

- (a) (i) Many candidates were able to bring an explanation but elaboration of those points was generally only seen in stronger answers.

(ii) Knowledge of disability provision was generally good, with adapted equipment and facilities, together with specialised coaches and increased numbers of role models, being the most common responses.
- (b) (i) Elite performers were usually suitably described, but weaker candidates tended not to extend their response to achieve full credit.

(ii) Most candidates commented on funding, better facilities and coaching being offered. Weaker candidates misinterpreted the question and described the personal factors needed for high levels of performance.

- (c)** Knowledge of methods to encourage mass participation was generally adequate. However, many candidates did not answer in sufficient detail to gain full credit.
- (d)(i)** Causes of violent play by performers was generally well known.
- (ii)** The majority of candidates were able to suggest use of on-field and off-field punishments, better officiating, rule changes to protect performers and drug testing as suitable methods to reduce player violence.

PHYSICAL EDUCATION

Paper 9396/12
Written Paper

Key messages

- Candidates should try to divide their time evenly between the three sections of the question paper.
- Candidates should take note of the command word being used and should ensure they answer the question being asked.

General comments

The standard of responses varied considerably. There was evidence of good understanding by strong candidates. Often **Section A** and **Section B** responses were not as strong as **Section C** responses. Some candidates gave very general and superficial answers about the topic in some questions. There were examples of no response being provided by some candidates for several questions suggesting a lack of knowledge of the syllabus content. There was also a tendency for weaker candidates to provide a single explanation to questions that had mark allocations that suggested the need for multiple points.

Comments on specific questions

Section A: Applied anatomy and physiology

Question 1

- (a) Many candidates were only able to describe the type of synovial joint at each location. Descriptions about why the shoulder is less stable and/or has a larger range of movement were only seen in stronger answers.
- (b) The majority of candidates were able to identify at least some of the many characteristics of slow oxidative muscle fibres.
- (c) Many candidates were able to identify the appropriate type of muscle contraction, type of movement and agonist for the shoulder, but far fewer candidates identified the type of movement and agonist for the hip joint.
- (d)(i) The concept of the anticipatory rise was well known by many candidates.
- (ii) The receptors involved in increasing heart rate were known by the majority of candidates. However, an explanation of the stimulus being detected was often lacking or incorrect.
- (e) Candidates' knowledge of the changes in lung volumes during exercise was generally not strong, and only the strongest candidates gained full credit.
- (f) Many candidates were able to partly answer but descriptions of the causes of the changes in pressure and velocity during circulation through the body were generally only given by the strongest candidates.
- (g) Only the strongest candidates understood more than the fact that there is less oxygen at altitude.

Section B: Acquiring, developing and performing movement skills

Question 2

- (a) Many candidates simply repeated the question and stated that motor skills are affected by early childhood experiences and environmental exposure, without further detail.
- (b) (i) The majority of candidates knew the components of Bandura's model well.
- (ii) Most candidates knew the benefits of using a role model and breaking the skill into parts. Fewer candidates mentioned the idea of highlighting cues, or making sure the observer is paying attention, and that the demonstration is accurate.
- (c) Most candidates provided suitable suggestions of how motor programmes are created and stored, with the ideas of practising, providing reinforcement and creating a mental image being popular.
- (d) (i) The concept of selective attention was known by the majority of candidates, although some omitted the idea of ignoring irrelevant stimuli.
- (ii) Only the strongest candidates were aware of how to improve selective attention.
- (e) Most candidates correctly identified the cognitive phase of learning, but some then simply described that phase rather than explaining how to maximise learning in this phase.
- (f) (i) This question was answered well by most candidates, although some confused positive reinforcement with positive feedback.
- (ii) Negative transfer was only occasionally described correctly. A common response was to describe the use of punishment.
- (g) (i) The majority of candidates were able to provide a contrast between intrinsic and extrinsic motivation.
- (ii) Only the strongest candidates were able to suggest that extrinsic motivation was a weaker form of motivation because it tends to lead to a loss of intrinsic motivation, or performers tend to demand more and more extrinsic rewards, or that the need for extrinsic motivation can lead to dysfunctional behaviour.

Section C: Contemporary studies in physical education and sport

Question 3

- (a) (i) This question was generally well answered with the idea of differences between sport and play being linked to rules, organisation, rewards and competitiveness.
- (ii) The majority of candidates were able to identify examples of the importance of physical recreation to both individuals and society.
- (b) (i) Most candidates were able to suggest several benefits to a country of investing in developing excellence. Weaker responses concentrated on potential financial benefits to a country and/or individuals.
- (ii) Most candidates commented on funding, better facilities and coaching being offered and suggested that there were also policies and/or initiatives in place to increase participation.
- (c) (i) Knowledge of public and voluntary provision was often limited. Many candidates could only state that voluntary provision was through volunteers, rather than comparing the two providers.
- (ii) The majority of candidates were able to gain credit for suggesting that private provision might be expensive, but fewer indicated the positive aspects of more choice and more up-to-date equipment.
- (d) Many candidates highlighted the negative aspects of the media's influence on sporting competition rather than the positive. Weaker candidates tended to concentrate their answers on the need for

performers to take drugs to achieve success. Few candidates included direct changes to sporting competition such as changes to start times, rule changes, advertising breaks, and the increasing role of technology in officiating.

PHYSICAL EDUCATION

Paper 9396/13
Written Paper

Key messages

- Candidates should try to divide their time evenly between the three sections of the question paper.
- Candidates should take note of the command word being used and should ensure they answer the question being asked.

General comments

The standard of responses varied considerably. There was evidence of good understanding in all three sections. However, some candidates gave very general and superficial answers about the topic for several questions. There was also a tendency for weaker candidates to provide a single explanation to questions that had mark allocations that suggested the need for multiple points.

Comments on specific questions

Section A: Applied anatomy and physiology

Question 1

- (a) (i) The majority of candidates were able to identify two types of joint in the spine. Descriptions of the type of movement possible at each joint were less accurate because some candidates did not use the appropriate descriptive terms.
- (ii) There was a lack of clarity in descriptions of the role of external oblique and erector spinae muscles by many candidates.
- (b) The majority of candidates were able to identify items 1 and 2. Fewer were able to identify items 3, 4 and 5.
- (c) (i) Many candidates limited their response to suggesting that an increase in heart rate causes the increase in stroke volume during exercise, rather than describing Starling's Law and the relationship between venous return and stroke volume.
- (ii) Candidates knowledge of the structures within the heart that control heart rate was generally good, with many responses achieving full credit.
- (d) The majority of candidates were able to identify two mechanisms that aid venous return. Some candidates however did not give sufficient detail when providing a description of the mechanism.
- (e) The role of haemoglobin in transporting oxygen was generally better known than the role of myoglobin.
- (f) Many candidates were able to suggest a number of structures that aid the gaseous exchange process, but occasionally these descriptions lacked a suitable explanation of how they aid the process.

Section B: Acquiring, developing and performing movement skills

Question 2

- (a) Candidates generally understood the concepts of open/closed, internal/external pacing and discrete/continuous more than they did the high/low organisation continuum.
- (b) Many candidates found this question challenging, with identification of examples of motor abilities and fundamental motor skills being the predominant methods of gaining credit. Few candidates were able to describe the progression of innate abilities to fundamental motor skills to sport-specific skills through practice and reinforcement by coaches.
- (c) The cognitive theory of learning was known by many candidates, although there were few answers that achieved full credit.
- (d) There were a number of stronger candidates who answered this fully correctly but others were limited to describing, in anecdotal form, how skills are performed.
- (e) Most candidates correctly identified and gave examples of positive reinforcement, but many confused negative reinforcement with punishment.
- (f) This question was only answered well by stronger candidates. The question only concerned the input stage of information processing, but many answers were broader.
- (g) The majority of candidates were able to link drive reduction theory to a loss of motivation, but few were able to extend this link to mention the drive required to succeed that works by reinforcement, and the need for goals to be reset once success has been achieved to limit reduction in drive.

Section C: Contemporary studies in physical education and sport

Question 3

- (a) This question was generally well answered with developing health and/or fitness, provision of a variety of activities, enjoyment and the compulsory nature of physical education being the most common answers.
- (b) Most candidates were able to identify the concepts of real and perceived risk, and the examples provided were usually suitable.
- (c) (i) Knowledge of the sports performance pyramid tended to be either well known or completely unknown.
(ii) The majority of candidates were able to identify the need for funding, facilities, coaches, and additional support.
- (d) (i) Most candidates were able to identify the benefits of participation. Popular responses included improved health and/or fitness, enjoyment, employment, and social and mental benefits.
(ii) Reasons for not taking part in physical activity were well known by most candidates.
- (e) This question was generally only answered well by stronger candidates with many candidates limiting their response to the impact of the media and commercialisation on the financial aspects of sport rather than the impact on the spectator. Stronger candidates identified the positives of higher standards of performance, better facilities, enhanced viewing experience and the generation of role models, as well as the negatives of reduced attendances, advertising breaks and changes to rules and the scheduling of events.

PHYSICAL EDUCATION

Paper 9396/32
Written Paper

Key messages

- Candidates should make sure that sporting examples are used where this is a requirement of the question.
- Some questions ask for a specific number of answers. Where this is the case, candidates should limit themselves to the number stated in the question.
- Candidates should be able to describe a recognised test of all the fitness components listed in the syllabus. Tests must have some method of evaluation so that results can give a meaningful indication of fitness.

General comments

The majority of candidates showed a broad understanding of all three sections. The quality of written communication was very good, typically showing an excellent standard of English, particularly in the use of correct technical language. Weaker candidates tended to give short answers that did not always take account of the number of marks that were available for the question.

Comments on specific questions

Section A: Exercise and sport physiology

Question 1

- (a) Stronger candidates gave very detailed descriptions of both the Krebs cycle and the electron transport (transfer) chain. Weaker candidates tended to describe irrelevant information.
- (b) Many candidates were able to explain the improvements well. Some strong candidates stated that as a result of this lactic acid is removed quickly. Weaker responses were often limited to cardiovascular differences and these candidates often did not develop their answers.
- (c) (i) Most candidates were able to give a correct definition of strength endurance. Some candidates produced a long list of factors affecting muscular endurance, or explained each factor which was not required.
- (ii) Many candidates could identify and describe a recognised test of strength endurance. Weaker answers described a test of a different fitness component, or described a method of training to improve strength.
- (iii) The vast majority of candidates could state that strength training resulted in an increase in size of muscle or hypertrophy. Stronger candidates also described increases in stores of PC and glycogen, increased capillarisation and many other factors.
- (d) Many candidates gave a clear definition of both reversibility and moderation and applied them to a fitness training programme. Some answers did not define the principles of training but gained partial credit for applying them correctly to a training programme.

- (e) The strongest answers stated that BMI can be harmful to health and gave at least one illness linked to obesity. They also outlined how elite athletes have high percentages of muscle and very little fat, that muscle weighs more than fat, and that BMI does not distinguish between muscle and fat as it is based on height and weight/mass alone.

Section B: Psychology of sport performance

Question 2

- (a) (i) The vast majority of candidates stated that the trait perspective involved innate or inherited traits that an individual was born with. The best answers added that these traits were enduring, stable or pre-determined.
- (ii) Many candidates could make one point about the interactionist approach to personality. Stronger candidates described how it is a combination of trait and social learning theories and that behaviour can change depending on the situation. Most candidates gave a practical example to demonstrate this point. Weaker answers tended to describe the wrong theory.
- (b) Many answers were limited to making one or two points about how having need-to-avoid-failure characteristics meant that a performer would not take risks and would avoid challenges. The best answers gave multiple characteristics and explained why these characteristics would hinder sporting performance.
- (c) (i) This question proved challenging for many candidates. The strongest candidates were able to identify the two styles in Fiedler's model. Some candidates described in detail each style and this was not required.
- (ii) Most candidates could describe at least one feature of a highly favourable situation. Usually, it was linked to a team being highly skilled. The strongest candidates also described how relationships within the group were good, the leader was respected by the group and the task was very clear. Some candidates did not use a sporting example, which was a requirement of this question.
- (d) (i) Many candidates correctly defined self-efficacy.
- (ii) Almost all answers correctly gave use of encouragement and praise as one method to increase a performer's self-efficacy. The best answers also explained the use of previous accomplishments, vicarious experiences and emotional control and applied their explanations to sporting examples, as required in the question.
- (e) This question was generally very well answered. Some candidates did not use sporting examples to support their answers however.
- (f) Many candidates found this question challenging.
- (g) Most candidates could explain that aggression is due to copying role models who exhibit aggressive behaviour in the social learning theory. Only the strongest candidates developed their explanation by stating that aggression must be reinforced to be learned.

Section C: Olympic Games: a global perspective

Question 3

- (a) This question was well answered. Most candidates stated that sponsorship, selling media rights, ticket sales and the IOC were sources of funding. Some candidates produced a long list despite only three sources being required.
- (b) Stronger candidates understood what a boycott was, were able to name the countries that boycotted specific games and could then describe why each boycott occurred. Many candidates stated that USA boycotted the 1980 Moscow games and the USSR boycotted the Los Angeles games in 1984. The strongest candidates gave clear explanations for each boycott. Again, some candidates wrote about more than three boycotts, although a specific number was requested.
- (c) Most candidates explained that Hitler used the 1936 Berlin games to show the superiority of the Aryan race, and that Jesse Owens beat German athletes to win his events. Strong answers sometimes went on to say that Jesse Owens won four gold medals, and in the long jump final his German rival showed great sportsmanship by helping Jesse Owens with his run-up, and that they became good friends.
- (d) This question challenged many candidates. Most candidates talked about the movement of thousands of people from their homes. The strongest answers explained the development of infrastructure, including roads and railways being built, the removal of old and dilapidated housing and the use of foreign exchange reserves.
- (e) There were some excellent responses to this question with candidates giving many benefits to an athlete related to the spectacular aspect of the Olympic Games. These answers included pushing their body to the limits, competing against the best in the world, showing bravery in the face of competition, striving for the highest standards, meeting athletes from other cultures and taking part in the opening and closing ceremonies. Almost all answers described how athletes would gain extra money and sponsorship after competing in the Games.
- (f) Some candidates struggled to give suggestions that might remove politics from the Olympic Arena. Some excellent suggestions included staging the Olympics at one permanent site, the games being run exclusively by the IOC rather than the host country, and the removal of national flags, anthems and medal tables, with athletes competing as individuals rather than as part of a national team.

PHYSICAL EDUCATION

Paper 9396/33
Written Paper

Key messages

- Candidates should make sure that sporting examples are used where this is a requirement of the question.
- Some questions ask for a specific number of answers. Where this is the case, candidates should limit themselves to the number stated in the question.
- Candidates should be able to describe a recognised test of all the fitness components listed in the syllabus. Tests must have some method of evaluation so that results can give a meaningful indication of fitness.

General comments

The majority of candidates showed a broad understanding of all three sections. The quality of written communication was very good, typically showing an excellent standard of English, particularly in the use of correct technical language. Weaker candidates tended to give short answers that did not always take account of the number of marks that were available for the question.

Comments on specific questions

Section A: Exercise and sport physiology

Question 1

- (a) Stronger candidates gave very detailed descriptions of both the Krebs cycle and the electron transport (transfer) chain. Weaker candidates tended to describe irrelevant information.
- (b) Many candidates were able to explain the improvements well. Some strong candidates stated that as a result of this lactic acid is removed quickly. Weaker responses were often limited to cardiovascular differences and these candidates often did not develop their answers.
- (c) (i) Most candidates were able to give a correct definition of strength endurance. Some candidates produced a long list of factors affecting muscular endurance, or explained each factor which was not required.
- (ii) Many candidates could identify and describe a recognised test of strength endurance. Weaker answers described a test of a different fitness component, or described a method of training to improve strength.
- (iii) The vast majority of candidates could state that strength training resulted in an increase in size of muscle or hypertrophy. Stronger candidates also described increases in stores of PC and glycogen, increased capillarisation and many other factors.
- (d) Many candidates gave a clear definition of both reversibility and moderation and applied them to a fitness training programme. Some answers did not define the principles of training but gained partial credit for applying them correctly to a training programme.

- (e) The strongest answers stated that BMI can be harmful to health and gave at least one illness linked to obesity. They also outlined how elite athletes have high percentages of muscle and very little fat, that muscle weighs more than fat, and that BMI does not distinguish between muscle and fat as it is based on height and weight/mass alone.

Section B: Psychology of sport performance

Question 2

- (a) (i) The vast majority of candidates stated that the trait perspective involved innate or inherited traits that an individual was born with. The best answers added that these traits were enduring, stable or pre-determined.
- (ii) Many candidates could make one point about the interactionist approach to personality. Stronger candidates described how it is a combination of trait and social learning theories and that behaviour can change depending on the situation. Most candidates gave a practical example to demonstrate this point. Weaker answers tended to describe the wrong theory.
- (b) Many answers were limited to making one or two points about how having need-to-avoid-failure characteristics meant that a performer would not take risks and would avoid challenges. The best answers gave multiple characteristics and explained why these characteristics would hinder sporting performance.
- (c) (i) This question proved challenging for many candidates. The strongest candidates were able to identify the two styles in Fiedler's model. Some candidates described in detail each style and this was not required.
- (ii) Most candidates could describe at least one feature of a highly favourable situation. Usually, it was linked to a team being highly skilled. The strongest candidates also described how relationships within the group were good, the leader was respected by the group and the task was very clear. Some candidates did not use a sporting example, which was a requirement of this question.
- (d) (i) Many candidates correctly defined self-efficacy.
- (ii) Almost all answers correctly gave use of encouragement and praise as one method to increase a performer's self-efficacy. The best answers also explained the use of previous accomplishments, vicarious experiences and emotional control and applied their explanations to sporting examples, as required in the question.
- (e) This question was generally very well answered. Some candidates did not use sporting examples to support their answers however.
- (f) Many candidates found this question challenging.
- (g) Most candidates could explain that aggression is due to copying role models who exhibit aggressive behaviour in the social learning theory. Only the strongest candidates developed their explanation by stating that aggression must be reinforced to be learned.

Section C: Olympic Games: a global perspective

Question 3

- (a) This question was well answered. Most candidates stated that sponsorship, selling media rights, ticket sales and the IOC were sources of funding. Some candidates produced a long list despite only three sources being required.
- (b) Stronger candidates understood what a boycott was, were able to name the countries that boycotted specific games and could then describe why each boycott occurred. Many candidates stated that USA boycotted the 1980 Moscow games and the USSR boycotted the Los Angeles games in 1984. The strongest candidates gave clear explanations for each boycott. Again, some candidates wrote about more than three boycotts, although a specific number was requested.
- (c) Most candidates explained that Hitler used the 1936 Berlin games to show the superiority of the Aryan race, and that Jesse Owens beat German athletes to win his events. Strong answers sometimes went on to say that Jesse Owens won four gold medals, and in the long jump final his German rival showed great sportsmanship by helping Jesse Owens with his run-up, and that they became good friends.
- (d) This question challenged many candidates. Most candidates talked about the movement of thousands of people from their homes. The strongest answers explained the development of infrastructure, including roads and railways being built, the removal of old and dilapidated housing and the use of foreign exchange reserves.
- (e) There were some excellent responses to this question with candidates giving many benefits to an athlete related to the spectacular aspect of the Olympic Games. These answers included pushing their body to the limits, competing against the best in the world, showing bravery in the face of competition, striving for the highest standards, meeting athletes from other cultures and taking part in the opening and closing ceremonies. Almost all answers described how athletes would gain extra money and sponsorship after competing in the Games.
- (f) Some candidates struggled to give suggestions that might remove politics from the Olympic Arena. Some excellent suggestions included staging the Olympics at one permanent site, the games being run exclusively by the IOC rather than the host country, and the removal of national flags, anthems and medal tables, with athletes competing as individuals rather than as part of a national team.