

Physical Education

Advanced GCE A2 7875

Advanced Subsidiary GCE AS 3875

Reports on the Units

January 2009

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This report on the Examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the syllabus content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the Examination.

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Chief Examiner's Report

The AS papers (2562/2563) on the legacy specification were entered predominantly by candidates re-sitting these units and attempting to improve their grades. There were few first time candidates. These papers were marked on-line.

The A2 legacy specification papers (2565/2566) were entered predominantly by candidates sitting for the first time and performances were not dissimilar to previous January cohorts.

Principal Examiners, in their reports, made reference to the depth of knowledge and understanding that strong candidates had and that the use of levels of response mark schemes allowed the examiners to credit candidates for this depth of knowledge. They also identified the importance of candidates' examination technique, particularly the fact that it was essential that candidates knew the meaning of the command words used in questions thereby ensuring that they were able to answer appropriately. They also identified that, particularly at A2, candidates did better when they spent time producing a short plan for their answers.

Other aspects of exam technique referred to by Principal Examiners were:

- Use of appropriate technical language
- Not repeating terminology used in the question
- Ensuring that practical examples are included in their answers.
- Only including information which is relevant to the question.
- Bullet points are only acceptable when the command word is 'identify.'
- Ensure that they read the instructions on the examination paper.

2562 The Application of Physiological and Psychological Knowledge to Improve Performance

General Comments

January 2009 offered the penultimate sitting of Unit 2562, as a first entry and re-sit opportunity, with the final examination of this unit being in June 2009.

As is often the case at January sittings, the cohort was predominantly those candidates attempting to improve the grade awarded at the previous sitting.

It was commendable once again to note the sound preparation demonstrated by some candidates; a clear indication of adequate study from candidates themselves and sound guidance from Centre staff.

However the lower end of the mark spectrum illustrated the fact that for some candidates, a re-sit opportunity does not result in an improvement in performance from their initial attempt at the examination.

As has been tradition on this unit, a number of comments are included as guidance to both Centre staff and students for future examination sessions. Whilst this unit will no longer be examined after June 2009 the guidance offered below will remain applicable to candidates undertaking future Advanced Subsidiary examinations in Physical Education.

- Candidates should ensure that the correct information is extracted from the question; a point illustrated by the fact that many candidates failed to identify stroke volume as being the key factor for the graphical information required in question 2a(i).
- The intensity or state of exercise is often not noted by candidates in Section A questions, thereby resulting in inaccurate information being supplied; as exemplified in question 2a(ii) where the information required relates to cardiac output during exercise rather than at rest.
- There is evidence available that candidates may have used the June 2008 examination paper as a mock exam and in some cases simply regurgitated material that bore some similarities with subject areas on that particular unit.
- There was clear evidence of areas that had not been adequately covered by candidates and centres; namely question 3(a) Motor Skill Development and 4(c) Insight Learning.
- Practical examples are still being omitted on some occasions when required, thereby resulting in a loss of potential marks.
- Graph work should always contain; clearly labelled axes, accurate identification of quantitative values and accurate plotting of the curve.

Comments relating to specific questions

Question 1

- (a) (i) Movement analysis questions have become a regular feature of Section A and on the whole are reasonably well answered when identifying the joint type and articulating bones. Weaker candidates however do not always correctly identify the agonist and antagonist muscle, the applied context proving to be too difficult for them.
- (ii) In some cases incorrect identification of the agonist muscle in (a) (i) led to an inappropriate exercise selection in this question. Once again there was clear illustration that applying knowledge of the muscular system to a movement, even though only worth two marks, was a stumbling block for many candidates.
- (iii) The stronger candidates accurately applied the question specifically to a dive. Weaker candidates however tended to limit their responses to point 2; increased stretch and point 6; increased enzyme activity. There were also frequent references to increased temperature, without relating the temperature increase to the muscular system.
- (iv) A generally well answered question, with many candidates gaining the maximum two marks available.
- (c) Biomechanics questions appear to have become less daunting to candidates in recent years, with the result that responses are generally accurate. In many cases the correct definition of one of Newton's Laws was applied to a correct practical example.
- (d) The concept of angular motion and its application to a sporting scenario proved to be a difficult concept to both describe and exemplify for many candidates. Candidates not making specific reference to the centre of mass or axis of rotation resulted in vague descriptions and applications to Physical Education or sport.

Question 2

- (a) (i) The requirement to sketch a graph relating to either the cardiac or respiratory system has been a regular feature in Section A in recent years. However, for some candidates this has simply meant rote learning the potential graph 'shapes' and selecting the one that appears to fit the question, irrespective of the detail contained within the question. The stronger candidates identified that the graph related to stroke volume and thereby selected an appropriate 'at rest' starting point, followed by further plotting relevant to stroke volume. Weaker candidates unfortunately often focused on heart rate and plotted a graph to reflect the changes that might occur to heart rate rather than stroke volume, thereby failing to plot each phase within the ranges available.
- (ii) This particular question is a clear illustration of candidates not extracting the relevant information from the question. The significant piece of information in this case was the requirement to describe factors that cause an increase in cardiac output **during exercise**. Whilst some candidates applied their knowledge to exercise and addressed factors such as in **increase** in venous return, heart rate, SA node firing rate, sympathetic control and temperature, others simply described factors at rest.

- (b) Responses to this question were a case of two extremes. While some candidates demonstrated their knowledge and understanding of the role of the pre-capillary sphincters and arteries in re-distributing blood, other candidates failed to identify the vascular system mechanisms and simply wrote either about the circulation of blood around the body or described the conduction system.
- (c) The vast majority of candidates incorrectly identified the diaphragm as one of the respiratory muscles in use. Other frequently occurring vague responses related to the intercostals, as to the more specific identification of the **internal** intercostals, equally the 'obliques' should contain reference to the internal/external obliques.
- (d) 'During exercise' was the key phrase for candidates, which if missed resulted in a lack of quantitative comments relating to diffusion.

Question 3

- (a) This particular subject area had not been examined for several years. Very few candidates addressed the concept of movement skills development and simply re-stated the three terms from the question without offering a suitable explanation or application to a practical example.
- (b) A reasonably well answered question on the whole with, **fewer** candidates on this occasion confusing low organisation with high organisation.
- (c) (i) Responses to this subject area, as is frequently the case, varied from accurate definitions from well prepared candidates, to responses where candidates simply re-phrased the term reaction time into 'the time it takes to react'. Other candidates did not identify reaction time as being from the 'onset' of the stimulus.
(ii) When candidates remembered to correctly label both axes they generally gained maximum marks. However, despite frequent reference being made to the manner in which graphs should be handled in previous Reports to Centres this particular piece of guidance was not heeded by many candidates on this occasion.
- (d) The average total for this question was 2/4, with marks generally awarded for reference to intrinsic feedback and adjustment of the movement. Closed loop control is a concept that still appears to be a stumbling block for many candidates, with few of them grasping the comparison aspect of the mechanism. Equally, there were only a limited number of candidates who accurately referred to level 2 and level 3 control.

Question 4

- (a) On the whole many candidates gained two of the three marks for identifying the automatic and efficient nature of skills within this phase of learning. Whilst several candidates attempted to access point 2 of the mark scheme their explanations were generally vague and simply suggested that performers 'didn't need to think about the skill', rather than describing the spare attentional capacity available for other aspects of performance at this stage.
- (b) Stronger candidates gained the two marks available, whilst weaker candidates referred to a 'large capacity' or 'information can be stored for years'.
- (c) Despite the fact that candidates were given four key phrases from the cognitive theory of learning concept, responses were generally limited, with a substantial number of candidates only gaining one mark. This is a challenging concept and clearly one that differentiates between candidates.

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- (d) (i)** Generally well answered.
- (ii)** There were some examples of well thought out responses, which contained accurate exemplification. However, as is often the case with a question relating to motivation, some candidates described feedback.
- (iii)** On the whole a well answered question, with the majority of candidates scoring two or three marks.

2563 Contemporary Studies in Physical Education

General Comments

This was the penultimate 2563 Contemporary Studies paper. The final one will be sat by candidates in Summer 2009 after which the new AS G451 (first examined Jan 2009) will take over completely. So this was a 're-sit' paper without the usual one-third or so candidates sitting the module for the first time part way through their AS studies. Probably largely for this reason the mean score achieved was lower than past years.

This paper did not have a question marked with a levels of response mark scheme (unlike the new G451 where the 10-mark question at the end of each of the three theory sections will be marked with a levels of response mark scheme) thus allowing candidates to gain credit for:

- Knowledge and understanding
- Critical evaluation (or discussion or explanation or development or analysis)
- Skills in linking their theoretical work to practical examples
- Quality of written communication (QWC).

This 2563 paper is out of 45 marks. Each of the two questions has 21 marks with three marks awarded for QWC. The vast majority of candidates scored better on question one than on question two. Very few candidates scored over 40 or below 15 marks.

Scripts are marked on-line by the examining team and each script is scanned before being assigned to an examiner's work list. It is essential, therefore, that candidates obey instructions such as: **do not write in the bar codes**. They should also be discouraged from writing in margins and below lined areas as it is not possible to see or annotate what is written in these areas. In general the Quality of Written Communication seemed to be lower than recent years.

Comments on Individual Questions

Question 1

- (a) (i) **Identify possible benefits of Physical Education – other than health and fitness** (4)

The straightforward command to 'identify' on a popular area of the specification meant that this opening question was generally very well answered with a good number of candidates achieving a max of four marks. Some vague use of the word 'skills' on its own meant candidates missed marks.

- (ii) **Suggest reasons why regular high quality Outdoor Education is only available in some schools.** (3)

While many candidates scored well here (notably points 1,2 &5) a number did not pick up on the requirement to focus on Outdoor Education specifically, rather than Physical Education in general. Candidates who understood the need to be specific rather than vague (for example realising that the words 'access' or 'location' on their own without added development / context could not gain credit) did well. Similarly, weaker candidates referred to a 'lack of funding' without explaining what that funding was needed for.

- (iii) **Identify current initiatives and strategies to develop sport in schools.** (4)

The most frequent correct responses here were for points 1,3,5 and 6. Only a limited numbers of candidates scored a max here with the Gifted and Talented programme being seldom mentioned

- (b) **Why would the Olympic Games be classified as sport rather than as physical recreation?** (4)

This question was looking for why the Olympic Games are sport rather than why the Games are not physical recreation and many candidates did very well here. All of the points on the mark scheme were visited. Again candidates should be encouraged to add adjectives to their key words in order to address the exact question e.g. the Olympic Games is performed with **high levels of** skill or fitness rather than just skill or fitness which would have been marked as 'Vague'. Those who did less well gave a comparison of sport and physical recreation which was not required here. Another common mistake was to use comparative terms such as 'higher' and 'better' which was not sufficiently specific.

- (c) **Explain how sponsorship can have both positive and negative effects on performer.** (6)

This question had a sub max of four marks for either positive or negative effects of sponsorship. This question was answered fairly well with points 1,2, 5 & 9 being awarded most frequently and with many candidates accessing four from six marks here. There were a large numbers of repetitions for Pt 2 (funding) and candidates can be encouraged to think broadly on a question such as this. Just a few candidates scored a max of six marks here. The command word 'explain' meant that key word answers such as 'pressure' on its own could not score. However the response '**the pressure put on performers may lead to lower performance or to playing when injured**' would have gained a mark.

Question 2

- (a) (i) **In the context of sporting excellence explain the following terms: policy, provision, administration.** (3)

This question was poorly answered with a very small number of candidates gaining three marks max. Those who scored one mark most commonly accessed Pt 2 (provision).

- (ii) **Give possible reasons why National Lottery funding is allocated on the basis of performers' world ranking / performance at major competitions. Identify potential disadvantages of allocating National Lottery funding in this way.** (4)

There was a sub max of 2 for each part of this demanding question which has not been asked before and which required candidates to consider and evaluate rather than simply recall learned key facts. The question was not well answered on the whole with comparatively few of the 13 points on the mark scheme being accessed. Candidates realised that the question was testing their understanding of National Lottery funding but frequently wrote about the positive effects of having funding (for the first part of the question) and the negative effects of not having funding (for the second part) rather than weighing up why funding might be allocated in this way. As always, candidates need to practise 'pulling questions apart' to ensure they focus on what is being asked and stick tightly to it.

(iii) How do National Governing Bodies such as the Hockey Association (HA) attempt to increase levels of excellence in their individual sports? (4)

The top one third of candidates scored very well here while others failed to link their ideas with the role of NGBs in promoting **excellence** (with a large number writing about developing and encouraging mass participation at the base of the performance pyramid). A number of candidates concentrated on hockey, rather than seeing the generic nature of the question i.e. how do NGBs encourage excellence in their sports? The subject of excellence needed them to be precise in their responses e.g. provide 'high level competition' or 'high performance coaches' Opportunities to gain marks were lost with vague responses such as 'give coaching'. The funding mark was least often awarded with candidates' attempts at gaining this mark often being too vague. The following more specific answer is what examiners were looking for: **'selection for (or distribution of) lottery (or World Class Programme or TASS or Sport Aid) funding'**.

The final three questions examined the Sport and Culture section of the specification.

(b) (i) Describe sport and commercialism with reference to the American Dream (4)

This question was answered with Points 1-6 all accessed successfully and with Pt 7 (spectatorism) least often described by candidates. Some spent too long explaining the American Dream, listing the associated key words for which they could only be credited once, and did not address the other points.

(ii) Give reasons why Kenya wants its runners to achieve international sporting success. (3)

Most candidates understood the notion of nation building / the shop window effect (point 1) with the best scoring a max of three marks very efficiently here. All marks on the scheme were accessed regularly. A minority of candidates confused the two parts to this question, listing strategies and reasons in both parts.

(iii) Explain the strategies used by Kenya to achieve success in sport. (3)

Many scored a max of three marks quite easily here with all points on the mark scheme being accessed. As always the command word needed careful attention here so an explanation rather than identification of points was required to gain credit. For example, examiners were looking for reference to *'using'* high profile / low technology sport/s as a strategy for achieving sporting success rather than simply a bullet pointed list including key recalled strategies without development.

2565 Physical Education: Historical, Comparative, Biomechanical and Sport Psychology Options

The Options paper requires candidates to respond to two questions from the four topics studied; Historical Studies in Physical Education, Comparative Studies in Physical Education, Biomechanical Analysis of Human Movement and Psychology of Sport Performance. Three marks are available for the Quality of Written Communication.

The January entry once again showed a great range in candidate knowledge and understanding. On the one hand, many candidates were very well prepared and could offer sufficient depth to their answers and consequently secured very high marks. In contrast, there was evidence from the Examiners that, in some cases, candidates were insufficiently prepared for the examination. This was often reflected either in a significant differential between the marks gained in the two questions answered, or in the lack of detail provided to questions that required an analytical response.

The paper showed equal successes across all four questions with Comparative and Sports Psychology average marks achieving the same levels as History and Biomechanics. Whilst the general trend in popularity towards answering History and Sports Psychology has been maintained, there appeared to be evidence that more centres were preparing candidates to answer the Comparative question. Few centres entered candidates who chose to answer the questions from Biomechanics.

Examiners noted the continuing improvement in quality of language marks and the candidates' ability to structure their answers. Occasionally, weaker candidates failed to offer enough detail for the number of marks available. There were instances of candidates writing their answers in 'bullet-point' form which detracted from their quality of language mark.

Question 1

- (a)** Candidates often scored a max on the first part of the question in reference to the 1902 Model Course. Objectives, Content and Methodology were well known and all points on the mark scheme were regularly identified in their answers. Answers to the 1950s Moving and Growing / Planning the Programme part of the question were not as comprehensive or successful. Many candidates were able to identify the Objectives, often citing 'enjoyment' or 'cognitive, social and physical skill development', and the methodology, usually referring to the 'decentralised' or 'child centred' approach, but candidates were unable to describe the content of these programmes.
- (b)** The question on 'Reasons for the growth and development of association football after 1850' was answered very well. Transport improvements, increased free time, greater organisation and the provision of purpose built facilities regularly featured. All points on the mark scheme were developed, however, with the better candidates able to include broken time payments and the opportunities for professionalism.
- (c)** The levels marked question on public schools, 'Describe each of the three stages with reference to the development of team games in each stage' provided an excellent opportunity for candidates to demonstrate their understanding of the development of team games in public schools. Generally, descriptions of each stage were handled better than references to the development of team games.

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In particular, candidates showed a very good appreciation of the nature of public schools in both Stage 1 and 2. Both the 'bullying and brutality' and 'social control' phases were expanded on with a clear understanding of the environment that pertained at the time.

Weaker candidates were unable to support this appreciation of the time with adequate reference to team games. There were, however, many outstanding responses which made the relevant links to the development of team games in each stage.

Question 2

- (a) (i) The question on the attraction of large crowds to sports fixtures in American High Schools was well answered with high standard of competition, entertainment value and media hype the most common responses. All points on the mark scheme, however, were given and the question often scored a max.
- (ii) The benefits to a performer of a sports scholarship was more successfully answered than the drawbacks but the question, as a whole, was well tackled. The first four points on the mark scheme were often cited as benefits whereas only the time commitment featured regularly in candidate responses on drawbacks. Better candidates did, however, outline the potential commercial exploitation and contractual nature of the agreement.
- (b) (i) Initiatives used in Australian schools to deliver sport and Physical Education were not described well. PASE and SEPEP were often identified but there were rarely answers from the remainder of the mark scheme.
- (ii) Candidates often scored well in their explanation of why outdoor education has a high priority in Australian schools, often referring to favourable climatic conditions, the opportunities that a vast, hostile terrain provides and the necessity of pupils learning survival skills in such conditions.
- (c) (i) National pride and the benefits to the economy through tourism were the most regularly given points from the mark scheme. The question on why the Tour de France is considered by the French to be an important sporting event was answered well with most candidates securing a max.
- (ii) Candidates were generally unable to provide the depth of answer required in their explanation of how sporting excellence is developed in France. Weaker responses failed to identify or describe the place of INSEP and only the better candidates were comfortable describing the relevant links between INSEP, CREPS and the school based initiatives.

This was the levels marked part of the question and certainly provided the required differentiation in candidate responses.

Question 3

- (a) Surprisingly few candidates scored well on this opening question on centre of mass (COM). Better candidates were able to define COM and often gave two relevant examples of how performers can improve stability, often through bending their knees and widening their stance, but few were able to explain how a performer uses their COM to maintain balance.
- (b) (i) The principle of moments was well understood by most candidates with many securing a max. It was pleasing for Examiners to note that candidates mostly used the correct units in their answer. Calculations were generally done well.

- (ii) Whilst some candidates were able to identify the class 2 lever system, most were unable to secure a second mark. Candidates were often vague in their explanation of why their lever system is more efficient than that of the elbow during a bicep curl.
- (c) (i) The quality of free body diagrams showing the forces acting, in this case on the ball, continue to improve. The 'weight' force was often correctly shown but weaker candidates were unable to show that the 'action force' needed to come from the edge of the ball.
 - (ii) Many candidates secured a max for showing how you could work out the resultant force acting on the ball at the moment of contact. This was often most successfully achieved with the use of a diagram showing the 'parallelogram law'.
- (d) The levels marked part of the question on factors that determine the horizontal distance a ball is kicked garnered the usual mix of responses. Better candidates were not only able to identify the three key factors; speed of release, angle of release and height of release, but were also very capable in explaining their relevance. Weaker candidates sometimes identified factors and did not support their answer with relevant explanations.

Question 4

- (a) (i) What appeared, on the surface, a straightforward recall question appeared to cause quite a problem for many candidates. Often the terms 'external' and 'internal' were mistaken as references to the level of control exerted by the performer; a possible connection to the pacing continuum taught in the AS course. Better candidates identified the key aspect of 'focus on' or 'concentrate on' and were able to accurately define broad, narrow, external and internal.
 - (ii) The application of a practical example to explain each of the four attentional styles proved most challenging. The very best candidates showed their understanding of the four styles and applied a suitable practical example. Weaker responses often offered no explanation of the style. eg broad - 'passing in football'.
- (b) The levels marked part of the question gave candidates great scope to demonstrate their knowledge and understanding of psychological theories pertaining to the influence of an audience on performance.

Once again, however, Examiners reported that candidates often did not exemplify their responses with practical examples and even some very knowledgeable candidates failed to go beyond Level 1, two marks as their descriptions of the various theories failed to include practical exemplification.

The weaker responses failed to identify the relevant psychological theory, describing in fairly vague terms the affect an audience may have.

Examiners were pleased to note that there were a significant number of candidate responses at the top of Level 3 with detailed explanations fully identifying both positive and negative influences.

- (c) (i) The different attributions in Weiner's model were well understood with external, internal, stable and unstable regularly securing a max. for candidates.
 - (ii) The explanation of attributions was generally handled well with the first five points on the mark scheme often described. Examiners again highlighted the poor examination technique which resulted in a number of good answers not achieving full

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marks as a result of the lack of practical examples. In addition there were some excellent theory responses on attributions which failed to connect with how this affected motivation. The importance of good examination technique again needing to be understood by candidates in the preparation of their answers was underlined.

2566 Exercise and Sport Physiology and the Integration of Knowledge of Principles and Concepts Across Different Areas of Physical Education

General Comments

The vast majority of the candidates are well prepared and showed well-planned answers. Many candidates scored well on the compulsory question. Some candidates wrote outstanding answers, especially when responding to the Anatomy and Physiology and Exercise Physiology options. Some candidates are including too much irrelevant material in the synoptic part of the paper. Many of the other candidates showed a high level of knowledge and understanding of the topic area chosen in their synoptic response as well as being able to make links both within and between topic areas. The best candidates used appropriate technical and specialist vocabulary, which is necessary to gain high synoptic credit marks. The most popular route taken in the synoptic section of the paper was from anatomy and physiology to exercise and sport physiology with the rest going for either the skill and the psychology or the contemporary issues and the history. Few candidates attempted the comparative question and very few the biomechanics question.

Comments on Individual Questions

Section A

Sport and Exercise Physiology

- 1 (a) The effects and associated risks of the prohibited ergogenic aid RhEPO are well understood by candidates and most scored full marks for this part.
- (b) (i) Many gave an accurate definition of agility, although some did not convey the sense of speed and co-ordination. Most identified the Illinois agility test as the correct test for agility, although many struggled with the spelling of Illinois!
- (ii) Most candidates identified the two energy systems as ATP-PC and the lactic acid system. A few candidates simply wrote ATP system and score no marks. The need for accuracy in identification of systems is expected at this level. Many candidates discussed the advantages and disadvantages of one of these systems generally well, although only the best gave at least two points as advantages and two points for disadvantages. If the command is to discuss then candidates are expected to explore in depth both advantages and disadvantages. The weaker candidates confused their answer mixing up the systems or giving aerobic explanations.
- (iii) This part of the question discriminated well those that could attend to detail and had covered this area of the specification well. Others simply defined using the same terminology as the question and could not put each type of strength into context. The better candidates recognised that maximum strength is the maximum amount of force that can be exerted by a muscle in a single contraction. Weaker candidates did not include single contraction and therefore could not gain the mark available. Many candidates could not give an accurate definition for elastic/explosive strength. Candidates' explanations about when and why each type of strength would be used were generally quite

poor. Many candidates were unable to contextualise these types of strength. The better candidates who had been prepared well by centres that teach the application of theory to practice wrote well about when each type of strength might be used during the appropriate test. It was evident that a number of candidates had not read the question carefully enough and did not apply the strength types to the test and applied the strength to random sports activities.

Section B

Scientific focus question

Part 1

(a) Application of anatomical and physiological knowledge to improve performance

Most candidates chose the route from Anatomy and Physiology to Exercise Physiology and most candidates who attempted this route scored well in the first part related to movement analysis and less well with the explanation of how the structure and function of slow twitch muscle fibres is suited to prolonged exercise. Those candidates who rely heavily on recall rather than also applying knowledge to practical situations scored less well.

Most candidates identified the hinge joint correctly and gave a good and detailed account of the bones being used and the functions of the muscles involved. Many also gave good explanations of the type of muscular contraction occurring in the biceps brachii during the upward and downward phases of the biceps curl. Most also identified correctly that slow twitch or Type 1 muscles fibres would be used to carry out the exercise identified in the question. Many candidates, however, did not relate structure and function to prolonged exercise. Many simply gave a list of structural and functional aspects and did not apply these. For example, some wrote that slow twitch fibres have high mitochondrial density but did not state what this then leads to, for example more efficient aerobic respiration. The command 'explain' is the key here. Those that did not apply recall points cannot score marks for explanation. Centres are advised to reinforce the importance of understanding command words such as explain and discuss.

(b) Acquiring and Performing Movement Skills

Not many attempted this question, but those that did scored well. Most could identify the three phases of learning and many explained how each links to the learning of movement skills. Weaker candidates gave little more than the name of each phase. Those that explained by directly writing about the learning of skills scored well. The better candidates also gave practical examples for each and scored synoptic credit. Those that linked phases with confidence and attentional control also scored synoptic credit by linking AS material with A2 material.

Some candidates confused cognitive theory of learning with cognitive phase of learning even though 'theory' was emboldened in the examination paper. The better candidates explained well the holistic nature of this theory and gave good practical examples. Many of the weaker candidates left this part of the question unanswered. The benefits of whole practice were well explained by some candidates but weaker candidates were very superficial in their response. Candidates should be reminded that in this synoptic part of the paper candidates are expected to write in-depth and to make links between other topic material as much as possible.

Part 2

(c) Exercise and Sport Physiology

Most candidates answer this question, following on from the Anatomy and physiology question. Many scored well and made appropriate links as well as giving practical examples and using technical vocabulary accurately. Most candidates explained well the sit and reach test and identified the factors that affect flexibility. Some candidates simply identified the sit and reach test and did not explain this method and therefore could not score more than one mark for this. Passive flexibility training was not identified well by candidates but many described the use of PNF well and used good practical examples. Many candidates did not explain well the effectiveness of PNF flexibility training and too many answers were superficial and did not contain the appropriate physiological processes expected at this level. Many candidates did identify the physiological changes that can occur after a programme of such training. Most identified that there is often an increase in the length of connective tissue and muscles and an increase in the elastic properties of muscles. The best candidates also identified the inhibition of the stretch reflex. The better answers also made appropriate synoptic links with warm ups, muscle fibres and joint types, that gained good synoptic credit.

d) Biomechanical Analysis of Human Movement

Very few candidates attempted this question. Those that had followed a course in biomechanics did well and scored good synoptic credit by linking their material with Anatomy and physiology material showing good understanding across AS and A2 topics. Some candidates were inaccurate with their free body diagram with inaccurate labelling. For example the source of force was often inaccurate. The sketching of such figures should be practised regularly by candidates with full and accurate labels that clearly show the forces acting on the performer. Newton's Laws were on the whole well explained although the weaker candidates showed some confusion in the name of the law and its explanation, for example giving Newton 1 the explanation suited more to Newton 2. Newton's 3rd Law is well known and applied well in most candidates' answers. Many candidates were unable to apply theory to practice by relating centre of mass to take off and flight. Many gave confused explanations that did not discriminate between take off and during flight. The best candidates were clear in their explanations and also gave good synoptic links with the biomechanical aspects in the Anatomy and Physiology section of the AS specification. The best candidates also gave other practical examples to explain their answer and used technical vocabulary accurately and consistently.

(e) Psychology of Sport Performance

This question was less popular than previous years. Those that did answer it generally scored well but at times merely described rather than explained their answers. Most could identify what is meant by trait and state anxiety. The better candidates did more than simply give an explanation by giving practical examples to illustrate their answer. The best candidates even explored some of the generic characteristics between trait and state and the best also linked the two. The causes of aggressive behaviour was generally well answered although again the weaker answers were superficial and did not give the range of responses necessary to score high marks. For example some of the weaker candidates identified frustration or cues as aspects that cause aggression but did not give any other causes.

The final part of this question demanded an explanation of the use of anxiety management techniques. Many misunderstood the requirements of the question and gave a list of ways to combat aggression. The importance of reading the question carefully is again most important so that candidates can score well. The better candidates linked well anxiety management with not only anxiety but also aggressive behaviour.

Question 3 (socio-cultural focus)

Part 1

(a) Contemporary Studies in Physical Education

This was quite a popular question for this session. Candidates that scored well wrote with fluency and used lots of practical examples, opinions and links to A2 material, like History. The poorer candidates write in bullet points with few explanatory points. Listing pre-learned points will only score minimal marks at this level and with some candidates, centres should emphasise extended writing skills that explain ideas rather than merely to list them.

Most candidates recognised some roles of the coach and the better candidates explained these fully. Since this was significant part of the question it was expected that candidates would give more than two or three roles. The better candidates gave five or six possible roles and explained them in terms of preparing for performance and participation. Again the second part of this question demands more than just a list of ideas and the better candidates gave a good explanation of how participation of disabled performers could be increased. The better candidates not only wrote about access issues but also attitudinal aspects both for those that are disabled and those with positions of power that make decisions on provision.

Part 2

(b) Historical Studies in Physical Education

Most candidates who answered the socio-cultural question then went on to answer this historical question. The most successful candidates linked their answer well with contemporary issues and wrote in detail rather than as a list.

The characteristics of popular recreation are well known and were identified well by the vast majority of candidates. The cultural factors were less well known which reveals that some centres are not contextualising their material in this case linking the characteristics of such activities with social and cultural aspects. The better candidates do this well and make links between the harsh existence of the working classes with the types of activities they enjoyed. The features of community festivals were again not described fully enough for this level by some candidates. The poorer candidates simply repeated what they had written before about popular recreation. The better candidates showed a good depth of knowledge about festivals, fairs and wakes at that time. Good answers linked these festivals with the importance of social aspects such as public houses and the influence of the church.

Many candidates could not relate Real Tennis with popular recreation. The question asks 'to what extent' and as such is an invitation to show factors of the game that were similar to popular recreation and also factors that showed aspects that were very dissimilar (there are more of these). The best candidates also linked well with contemporary aspects of participation with some good points linking social class and involvement in tennis type games.

(b) Comparative Studies in Physical Education

Few candidates attempted this question in this section. Those that did showed good knowledge and understanding of mass participation in the USA but many wrote less well about the promotion of mass participation in either France or Australia linking with the UK. The features of Grid Iron Football were identified well by many candidates but only the better candidates made good links with these characteristics and limiting mass participation. The better candidates wrote about not only the games violence limiting

participation but also the elitist aspects of the game and the expense of playing it in its full form.

In the second part of the question, generally those that chose Australia to write about scored better than those that wrote about France. The better candidates recognised the prompts in the question and linked their material with school and sporting organisations' initiatives as well as government involvement. Those that ignored the prompts often wandered into a rambling description of sport in each country. Since this is the comparative section, it is expected that candidates compare the country they are writing about with the promotion of mass participation in the UK. Many candidates did attempt to use material from the UK and scored quite well. Much of the UK material in candidates' responses is dated and it is obvious which centres are more up to date in their teaching material because their candidates will refer to current initiatives and organisations rather than ones that have little significance today. The best candidates planned their answer well by identifying a short plan of action and then expanding their points with reference to the UK and other relevant material from the country they have chosen to write about.

Grade Thresholds

Advanced GCE Physical Education 3875 7875
January 2009 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	A	B	C	D	E	U
2562	Raw	60	39	34	29	24	20	0
	UMS	120	96	84	72	60	48	0
2563	Raw	45	31	28	25	22	19	0
	UMS	90	72	63	54	45	36	0
2565	Raw	45	33	29	25	22	19	0
	UMS	90	72	63	54	45	36	0
2566	Raw	60	48	44	40	37	34	0
	UMS	120	96	84	72	60	48	0

Specification Aggregation Results

Overall threshold marks in UMS (ie after conversion of raw marks to uniform marks)

	Maximum Mark	A	B	C	D	E	U
3875	300	240	210	180	150	120	0
7875	600	480	420	360	300	240	0

The cumulative percentage of candidates awarded each grade was as follows:

	A	B	C	D	E	U	Total Number of Candidates
3875	8.18	26.95	54.19	81.04	97.98	100.0	1080
7875	10.97	28.39	64.52	90.97	99.36	100.0	208

1288 candidates aggregated this series

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.

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