

A-LEVEL
PHYSICAL EDUCATION

7582/1 Factors affecting participation in physical activity and sport Report on the Examination

7582 June 2018

Version: 1.0

Further copies of this Report are available from aqa.org.uk

Copyright © 2018 AQA and its licensors. All rights reserved. AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

General Comments

This was the first 7582/1 A-level Physical Education paper with the mean mark being 46 out of 105. Both the specification content and the style and demand of questions were understood. It was very pleasing to see that many teachers and schools/colleges have adapted their teaching to focus on the assessment objectives (AOs). This allowed students to access the marks on this more rigorous style of assessment. There were a very small number of items unanswered and little evidence that students had run out of time. Students performed to a similar standard across all 3 sections of the paper with the mean mark being highest for skill acquisition (16.01) and lowest for applied anatomy and physiology (15.17).

The multiple-choice questions were answered well, although there was evidence of differentiation on them with the mean mark ranging from 58-97%.

The main area for improvement on short answer questions is ensuring students answer the question which has been set. Students need to read the question to ascertain the context and to identify the command word to ensure the focus and detail of a response matches the question. Students must then structure their responses to match the context and demand.

Responses to the 8 and 15 mark extended response items were mixed but it was encouraging that a number of students showed some clarity, structure and focus in their responses, showing a clear understanding of the AOs, in particular the ability to demonstrate knowledge (AO1) and apply it to the question (AO2). The ability to analyse or evaluate (AO3) was less understood and demonstrated by students in the extended responses. Schools/colleges should be aware that the highest number of marks in these questions are awarded for evaluation (AO3). If students demonstrate excellent knowledge and understanding along with application to the question but with no analysis or evaluation, the maximum mark awarded was five marks for an 8 mark question and 9 for a 15 mark question, due to the weighting of the AOs.

Students should consider how they structure answers to these questions. Those who presented work in sections dictated by the AO's found it difficult to access the highest marks. In the best answers to these questions students made clear links between their knowledge (AO1), application (AO2) and evaluation (AO3) to make coherent and well structed points addressing the specific questions which had been set. Many students used additional pages to compete the extended answer questions. However, this did not always lead to the award of additional marks as students frequently repeated themselves or began talking about information not relevant to the question set. It is suggested that more time spend planning an answer would have resulted in higher marks than the scattergun approach used by many students.

Structuring of the paper with regards to certain questions signalling where students should write their responses (e.g. by having numbers in the lines) was understood by most students and allowed for clearer demonstration of knowledge. Where students had not followed best practice the first two answers students have given were those marked irrespective of which line they were on.

Section A – Applied anatomy and physiology

Questions 01 and 02

97% of students correctly identified the baroreceptor as the receptor responsible for detecting a change in blood pressure. Only 61% of students correctly identified indirect calorimetry as the correct measure of energy expenditure. Those who did not get the mark most often confused the correct answer with a VO_2 max test.

Question 03.1

70% of students achieve the mark for this question. Where students failed to answer the question correctly it was most often due to failing to refer to oxygen in their answer.

Question 03.2

The mean mark for this question was 1.6 with most students able to explain that more oxygen was required by the working muscles and some highlighting that this was required for energy/ATP production. Fewer students were awarded the mark for the main focus of the question, which was stating that AVO_2 diff increases and supporting this statement with information from the table. This highlights the need for students to carefully read and answer the question set.

Question 04.1

Over a quarter of students were able to access the full 3 marks for this question. Where full marks were not awarded, common errors included naming the main agonist as the deltoid and stating that the movement occurred in the sagittal plane around the transverse axis.

Question 04.2

This question was answered well with a mean mark of 2.04. Students were able to provide a wide range of answers. Schools and colleges should be aware of the requirement in the specification to teach both characteristics and functions of each muscle fibre type. While both were accepted here, characteristics are structural features which identify the muscle fibre type (eg large muscle fibre diameter), while its functions are the resultant capabilities of the fibre as a result of its structure (eg high force of contraction).

Question 05

Answers to question 5 covered the full range of marks. Students awarded the lower marks tended to simply state the factors which affect VO_2 max. The mean mark for this question was in level 2 and students awarded in this band made an attempt to apply these factors to Chris Froome, and in some cases made limited evaluative comments, such as his increased VO_2 max allows him to work harder for longer. The best answers showed breadth and depth of knowledge, which was applied specifically to Chris Froome and made insightful evaluative comments regarding the impact on his performance in a race and/or compared to the average cyclist. In some high-level examples, students were able to discuss which factors were most significant, for example training can only have a limited effect as VO_2 max is largely dictated by genetics.

Question 06

This question had the lowest mean mark (4.45) of the fifteen mark questions. Students who found this question challenging had a poor knowledge of the proprioceptors involved in PNF, in some cases failing to mention the muscle spindles and golgi tendon organs or confusing their functions. Where knowledge was strong students were generally able to apply the training method to gymnastics. Generally, students spent a great deal of time and effort describing in detail the procedure of PNF stretching despite this not being the focus of the question. This tended to be at the expense of application (AO2) and evaluation (AO3). The best answers applied the training method to a range of sports for different reasons (increased range of motion for aesthetics, increased range of motion for improved efficiency of movement, injury prevention, etc) but also evaluated its suitability in these sports, highlighting the increased risk of injury and lack of impact on other components of fitness as examples of limitations.

This was an example of a synoptic question as the proprioceptors role in PNF and PNF as a specialist training method are in separate sections of the specification. Schools and colleges should be aware that there are synoptic questions on both papers, which can draw from content from anywhere in the specification.

Section B – Skill Acquisition

Question 07 and 08

93% of students correctly identified the phonological loop as dealing with auditory information.

Only 54% of students correctly identified D as the correct combination of feedback for a cognitive performer. Those who did not get the mark most often confused the correct answer with a B where the only difference was the knowledge of results/knowledge of performance option. While both forms of feedback would be applicable, knowledge of results is considered the most effective of the two for a cognitive performer.

Question 09

This question was answered very well with over 40% of students accessing full marks. Where students didn't achieve full marks, the most common error was the repeat of those characteristics of skill named in the question. Several students did not realise that economic and efficient constitute the same answer.

Question 10

This question targeted new content on the specification and it was pleasing that over 50% of students were able to achieve 2 or more marks. However, this was also the most common not-attempted question, with 2.3% of students not writing a response (the next highest not-attempted question was 0.7%).

The most common error was to confuse social development theory with the stages of learning (cognitive, associative and autonomous). While it was acceptable to use examples from different sports for each stage in this series, future questions could require students to apply their knowledge to the same activity throughout.

Question 11

This was an AO3 short answer question with its rigour reflected in the mean mark (1.6 out of 4). The most commonly awarded marks were for verbal guidance highlighting key cues when used with visual guidance, the possibility of information overload and that visual guidance may be more effective. Students often failed to discuss in enough detail to be awarded full marks, with only 3.8% achieving the maximum 4 marks. While not on the mark scheme, marks were awarded for highlighting that mechanical or manual guidance may be more appropriate due to its ability to develop kinesthesis and reduce risk, as these were considered examples of other appropriate points.

Question 12

For this question, responses ranged from 0 to 7, with a mean mark of 3.5. Basic answers tended to focus on the factors affecting responses time but didn't apply this knowledge specifically to a goalkeeper. The best answers not only explained strategies which would improve a goalkeeper's response time but linked these to specific factors affecting it and how it would specifically improve performance in a fully competitive situation.

Question 13

This question was generally answered well with students demonstrating good knowledge of progressive part practice and application of the skill continua to a tumbling routine. This is reflected by the mean mark of 5.8. Better responses not only justified the position on each continuum accurately, but then used this information to evaluate the suitability of progressive part as a practice method. Further successful evaluation was evident when students considered the suitability based on the skill level of the performer, and suggested alternative options when they were relevant.

Section C – Sport and society

Question 14 and 15

Most students (97.3%) identified local and specific as the characteristic of popular recreation.

Question 15 was the lowest scoring multiple choice question, with only 57.5% of students correctly identifying this as an example of channelling.

Question 16

87.7% of students achieved at least 1 mark on this question. The majority of these correctly identified meeting new people/making friend as a social benefit to the individual. The second mark proved more difficult to come by with a number of students simply stating increased happiness and confidence, which are mental benefits, unless specifically applied to social situations. Some students gave responses not specifically linked to the individual, eg decreased pressure on the NHS, which weren't credited.

Question 17

Most students achieved half marks or more on this question. Those who achieved 2 marks tended to identify an increase in publicity leading to an increase in sales. The next most common answer

was that links to sport/elite performers gave companies a better reputation. Some students failed to identify the requirement to explain the impact of the benefits, making links between them, and restricted themselves to a maximum of 2 marks.

Question 18

This was the most poorly answered question on the paper with students failing to link the differences between the two groups to the specific impact on participation, leading to a mean score of 1.06. Generally, students' knowledge of the differences between gentleman amateurs and working-class professionals was sound, but marks were only available for the evaluation of the impact on participation caused by these differences.

Question 19

This question had the lowest mean mark of the three 8 mark questions (2.9). This was due to the failure of a number of students to identify the focus of the question as socialisation and link this topic to the key terms of primary socialisation, secondary socialisation and gender socialisation. A few students focused on the opportunities available to women in sport without ever highlighting this as gender socialisation. Even in instances where knowledge was evident, the application to Laura and information provided about her in the question was limited. Some students talked about the negative effects socialisation could have had despite her participation still being positive at 22 years old. Very few students used the concepts of socialisation to explain her choice of middle distance running, instead focusing on athletics as a whole or using socialisation to explain why she didn't play other sports.

Question 20

This question had the highest mean mark of the three 15 mark questions (6.19). Students were able to identify and apply barriers to participation and strategies to overcome these to disabled athletes. Students scoring above the mean were also able to highlight that the figures in the table showed that strategies were currently ineffective as participation was decreasing. The best answers were able to evaluate strategies on their own individual merit, and make links between strategies and barriers, using information from the table and their own knowledge to support their writing.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results Statistics</u> page of the AQA Website.