

# PHYSICAL EDUCATION

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**Paper 0413/11**

**Theory**

## **Key messages**

Candidates should note the command word for each question as well as the number of marks available to ensure they answer the questions in appropriate depth.

Candidates should consider examples carefully, ensuring they use these to show their understanding.

Candidates should avoid repeating information already given in the question as this is not an efficient use of examination time.

## **General comments**

The majority of candidates answered all questions and gained partial credit on most questions. There was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good with answers clearly constructed in many cases by stronger candidates.

## **Comments on specific questions**

### **Question 1**

Most candidates were able to identify two types of media. A few candidates repeated the example provided in the question.

### **Question 2**

- (a) This was generally well answered but some candidates misidentified the ventricles and atrium and the correct side of the heart.
- (b) Many candidates gained credit for this question. Weaker candidates often repeated the same function around the mixing of blood or were confused about the role of the valves.

### **Question 3**

- (a) This was generally answered well by the majority of candidates. Some weaker candidates did not apply the benefit to snowboarding. This was most common when candidates attempted to apply the component of fitness, balance.
- (b) Many candidates gained credit for this question. Candidates who did not gain full credit often repeated a risk from the same category or the strategy lacked application.

### **Question 4**

- (a) Many candidates gained credit for this question.
- (b) Many candidates gained credit for this question. Weaker candidates sometimes could not provide an explanation of how it impacted recovery time.

### Question 5

- (a) Many candidates gained credit on this question and were able to identify characteristics to the stage of learning.
- (b) Most candidates gained credit for this question.
- (c) (i) Most candidates gained credit. Those that did not, often described single channel capacity.
- (ii) Candidates who gained credit on (c)(i) tended to also gain at least some credit on this question by suggesting appropriate influences on a coach.

### Question 6

- (a) Stronger candidates were able to explain a specific benefit to the phase. Candidates that did not gain credit provided answers that were too generic or did not focus on a specific benefit to that phase.
- (b) Candidates were able to suggest appropriate benefits, but some did not apply the 'gradually' aspect.

### Question 7

- (a) Many candidates gained maximum credit for this question. Weaker candidate's identified the wrong movement and agonist muscle.
- (b) Most candidates gained credit for this question.

### Question 8

Many candidates performed well on this question. Most candidates were able to suggest a variety of barriers.

### Question 9

Stronger candidates clearly identified a principle and applied it directly to circuit training. Weaker candidates did not apply an appropriate principle of training through incorrect application of learning. These candidates applied the principle of overload.

### Question 10

- (a) Most candidates gained full credit for this question.
- (b) Most candidates gained full credit for this question.
- (c) (i) Most candidates were unable to identify the components used to calculate minute ventilation, and therefore unable to identify the unit of measure.
- (ii) Candidates who described residual volume were able to identify an effect. Those candidates that were unable to describe residual volume were unable to identify the effect on exercise.

### Question 11

Many candidates were able to gain credit for their responses. Most candidates were able to identify a basic and complex skill. The most common errors were the omission of specific details in their justifications or identification of an appropriate games activity. Weaker candidates were unable to identify a basic or complex skill.

### Question 12

- (a) The strongest candidates usually gained full credit. Some candidates gained partial credit for their identification of PED's. Weaker candidates were often unable to apply a benefit to the performance for the identified sport to gain credit or an appropriate PED.

- (b) The majority of candidates could suggest a reason why PEDs are banned.
- (c) Most candidates gained full credit for this question.

**Question 13**

- (a) Most candidates gained full credit for this question.
- (b) The majority of candidates were able to suggest how the cyclist could reduce air resistance. Weaker candidates could give one suggestion but often repeated it for a second or were too vague to gain credit.

**Question 14**

- (a) (i) Few candidates were able to provide a correct definition of VO<sub>2</sub> max to gain credit.
- (ii) Candidates who correctly described VO<sub>2</sub> max in (a)(i), were generally able to identify and explain a factor affecting performance. Those candidates unable to describe VO<sub>2</sub> max were unable to apply this knowledge to a named factor and explain an affect to gain credit.
- (b) Most candidates were able to achieve credit for identifying one danger, but the majority of candidates stated just 'injury' not 'overuse injury'.

**Question 15**

- (a) (i) This was generally answered well. The majority of candidates were able to gain at least partial credit for the correct description of the stated contraction.
- (ii) Only stronger candidates gained full credit, but many candidates gained partial credit. Weaker candidates did not apply the correct application of the letters from the question to the contraction. These candidates often described movement rather than the contraction.
- (b) Most candidates were able to gain credit by defining the role of a tendon. Stronger candidates provided a clear example of application of movement. Some candidates were not able to apply the definition to movement at the elbow or answers were too vague for credit.

# PHYSICAL EDUCATION

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Paper 0413/12

Theory

## Key messages

Candidates should note the number of marks awarded in questions to ensure they answer the question in appropriate depth.

Candidates should be aware of the level of detail required from the command word in the question such as, explain, describe, suggest, state and identify.

Where questions require the use of a physical activity in the answer, candidates should carefully consider their choice before beginning to answer.

Where questions require candidates to apply their understanding to a physical activity, candidates should avoid giving generic descriptions. They should not change the activity or skill part way through their answer.

Candidates should avoid repeating the question in their answers as is not an efficient use of examination time.

## General comments

Most candidates responded to all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good with answers clearly constructed in many cases.

## Comments on specific questions

### **Question 1**

Some candidates found the question challenging and confused the descriptions or gave responses such as 'physical' and 'mental'.

### **Question 2**

- (a) The majority of candidates were able to correctly describe hypertrophy. The benefit to performance was less well answered with many candidates giving further descriptions of hypertrophy.
- (b) The strongest candidates gave clear descriptions of the long-term benefits of exercise without confusing them with the short-term effects.

### **Question 3**

- (a) This question was answered well, and many candidates gained full credit. Some other candidates confused muscle endurance with muscular strength as the component of fitness for the Multi-stage Abdominal Curl Conditioning Test.
- (b) Many responses did not have sufficient detail for credit to be awarded. The question required an explanation. Typical responses described a benefit of fitness testing without explaining how it could bring about an improvement.

(c) This question was usually answered well. A common error was not indicating either the speed or short distance of an object and giving responses such as referring to catching a ball in cricket rather than catching the ball when close to the bat.

#### Question 4

(a) (i) Most candidates accurately identified frequency and intensity as two key principles of overload. However, there was room for improvement in providing clear examples for each and emphasising the need for an increase to achieve overload.

(ii) Many candidates gained credit for responses suggesting increasing the weight that can be lifted until only one rep can be achieved. Some candidates mixed the two methods of calculating one rep max.

(b) Most candidates gained credit with responses such as taking part in a warm up or using the correct technique.

(c) Most candidates recognised the components of fitness that a sprinter could gain from weight training but a significant number did not add the benefit for the sprinter from this component of fitness.

#### Question 5

Candidates gained credit for responses that referred to greater awareness/advertising/increase sales of their product and the image of the sponsor being negatively impacted by a variety of factors. Some candidates gave very full responses but gave them from the view of the host nation or a performer.

#### Question 6

(a) This was often answered well with many candidates gaining full credit. The location of the Talus bone proved to be challenging for many candidates.

(b) The majority of candidates gained full credit for correctly identifying the two components of the synovial joint.

#### Question 7

This question was often answered well. However, some candidates did not note the word 'other' in the question and gave red blood cells as their response, which could not be credited as it formed part of the question.

#### Question 8

(a) (i) Stronger candidates gained credit for describing the difference between the type of contraction. Some candidates were confused between the type of contractions or got them the wrong way around.

(ii) Most candidates answered this question correctly.

(b) Most candidates were able to identify the correct movement and the antagonist for the elbow joint. The type of movement and the antagonist for the shoulder were less well known.

#### Question 9

(a) Candidates showed a good understanding of issues relating to diet.

(b) Most candidates gained partial credit for correctly identifying that aerobic and anaerobic respiration was used at the appropriate stages of the race. A smaller number of candidates used the correct equation for each type of respiration to gain full credit. Some candidates gave part of the comparison between aerobic and anaerobic respiration and in doing so did not answer the question fully.

### Question 10

(a) The question required candidates to explain the named factors of skill level. Therefore, answers needed to describe the factors and explain the effect on skill levels. Stronger candidates gave answers such as "if a performer is motivated, they will work hard in training sessions which will give them a higher skill level".

(b) (i) Some candidates gave components of fitness rather than a characteristic of a skilled performer. Those who gave an appropriate characteristic usually gave a good example from rugby.

(ii) Candidates usually gave being aesthetically pleasing as their response for the characteristic for a gymnast. However, in many cases the example was not linked to gymnastics but was a generic description.

### Question 11

(a) (i) Most candidates were able to identify the two levels of the pyramid required.

(ii) Some candidates confused the levels of the pyramid with the cognitive level of learning. Many answers related to the levels providing fun activities, that performers were beginners and that schools were involved at this level.

(b) Stronger answers suggested an increase in access to better coaching, more participation in higher quality competitions etc. Weaker candidates gave answers relating to the mental approach to playing at a higher level.

### Question 12

(a) This question was answered well.

(b) Most candidates gained at least partial credit here. Typical responses included that a cool down provides opportunities to reflect on performance and to mentally relax.

(c) Candidates needed to make it clear in their answers if they were referring to an increase or decrease in recovery time to gain credit.

### Question 13

(a) Many candidates answered this correctly.

(b) Answers needed to be precise to gain credit. For example referring to 'air' rather than 'oxygen', 'volume needed each breath' rather than just 'breathing', 'maximal volume of air breathed out after breathing in as deeply as possible' rather than 'air breathed out'. As a result, many candidates did not gain full credit.

### Question 14

Most candidates gained credit with many achieving full credit. The only common error was confusing long-term effects for short-term effects.

### Question 15

(a) (i) A significant number of candidates were able to answer this question correctly.

(ii) This question was answered well with many candidates achieving full credit.

(b) Many candidates correctly used gravity and air resistance as their choice of forces. The explanations were generally good. A common error was not linking answers to the long jump.

(c) The majority of candidates correctly identified different types of feedback. Common errors included the use of types of guidance rather than feedback.

# PHYSICAL EDUCATION

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**Paper 0413/13**

**Theory**

## **Key messages**

Candidates should note the number of marks awarded in questions to ensure they answer the question in appropriate depth.

Where questions require the use of a physical activity throughout an answer, candidates should carefully consider their choice before beginning to answer.

Where questions require candidates to apply their understanding to a physical activity, candidates should avoid giving generic descriptions. Also having chosen an activity or skill to answer a question candidates should not change the activity or skill part way through their answer.

Candidates should be aware of the level of detail required from the command word in the question such as. explain, describe, suggest, state and identify.

Candidates should avoid repeating the question in their answers as is not an efficient use of examination time.

## **General comments**

Most candidates responded to all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good with answers clearly constructed in many cases.

## **Comments on specific questions**

### **Question 1**

(a) (i) Most candidates were able to identify haemoglobin as the appropriate substance found in the blood.

(ii) This question was answered well and candidates demonstrated a good understanding of the function of components of blood.

(b) The majority of candidates gave appropriate functions of the named blood vessels. A common error was not giving enough detail for the function of capillaries

### **Question 2**

(a) Most candidates understood the functions of the skeleton but did not give enough detail to fully describe movement and protection.

(b) (i) Some candidates confused the position of the fibula and tibia.

(ii) Stronger candidates were able to apply the movements at the ankle to their named activity but some descriptions of the application were limited or confusing.

(c) Descriptions were generally good and most candidates were able to name the muscles and the movement that these muscles cause at the ankle.

### Question 3

- (a) Most candidates were able to describe leisure time, often using free time as part of their answer.
- (b) Most candidates gave a good description of each of the factors.
- (c) Candidates described the effects of media coverage well with answers relating to an increase in awareness of activities. Answers relating to health care and travel were less thorough. Answers often focused on the types of improvement rather than how it impacted on the growth of leisure activities.

### Question 4

- (a) Candidates sometimes described the component of fitness but did not apply this to basketball.
- (b) Most candidates were able to identify an appropriate test and gave a good description of the test.
- (c) The vast majority of candidates were able to describe the difference between skill and ability.

### Question 5

- (a) Some candidates focused on the athlete using a prosthetic limb and did not describe any other technology that the athlete might use. Stronger candidates described the use of the limb and then went on to discuss the use of lightweight clothing, footwear that provides better grip etc.
- (b) (i) Most candidates answered this correctly.
- (ii) The majority of candidates gained credit for giving high intensity and short duration.

### Question 6

Stronger candidates usually used the information in the question and applied it to an appropriate goal-setting principle. The majority of candidates were able to gain credit for identifying three goal-setting principles.

### Question 7

- (a) This was generally answered well with typical examples being increase in muscle size, strength, power and that weight training can be used to monitor progress easily.
- (b) A number of candidates gave responses that described the principle but did not apply it to overload. For example, referring to frequency, how often you take part in training required an increase in the number of times you take part in to answer the question fully.
- (c) Generally, candidates gained credit with responses such as fatigue, overuse injury and lack of appetite.

### Question 8

- (a) Many candidates were able to describe either real or perceived risk. However, answers required a comparison between the two, which many candidates found difficult.
- (b) Many candidates gave an appropriate risk and strategy when giving an answer to photograph **B**. When providing an answer to photograph **A**, a number of responses described the picture rather than the risk. However, there were many examples of an appropriate strategy.

### Question 9

- (a) Most candidates gained full credit but there was some repetition in answers when giving examples of social media.
- (b) This was answered well and the most frequent advantage given was an increase in fame and being more likely to attract sponsorship. The disadvantages proved more challenging to identify with the

most common correct response being the loss of privacy and reference to the effects of negative comments.

**Question 10**

- (a) Some candidates confused the characteristic of a skilled performer with components of fitness. Other candidates who were able to identify the characteristics correctly did not apply it to the elite performer. Stronger candidates were able to identify the characteristic and applied it appropriately to the elite performer
- (b) Most candidates were able to gain credit for output and included a description of the named skill being completed. Answers for input needed to include receiving information from the senses. Feedback needed to indicate using information to bring about change when repeating the skill.

**Question 11**

- (a) Most candidates answered this correctly. Candidates should be advised to select the activity carefully as some candidates gave very confusing examples. Stronger candidates used activities such as rugby, using pushing in the scrum and ripping the ball from an opponent when tackling.
- (b) Many candidates used the equation for partial credit. However, fewer gained full credit. Some candidates only described the relationship between two of the components.

**Question 12**

- (a) This question was often answered well with candidates gaining full credit.
- (b) Stronger candidates answered this correctly. The question required an explanation, so answers needed to show why health affects fitness and this was missing from many answers.

**Question 13**

- (a) This question was often answered well with candidates gaining full credit.
- (b) Candidates needed to describe the function of each component rather than just describing the component. Most candidates gained partial credit for trachea and the alveoli. The function of the diaphragm was less well explained.
- (c) Most candidates understood the basic principle of the breathing volumes, but some responses lacked the detail needed for credit.

# PHYSICAL EDUCATION

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**Paper 0413/02**

**Coursework**

## **Key messages**

Centres should use the PDF files provided in the samples database without converting them into other file types.

Links to external websites should not be used for providing video evidence of candidates' performances. All filmed evidence must be uploaded directly onto the Submit for Assessment platform.

It is usually most effective to organise filmed evidence by activity, some activities can allow for multiple candidates of similar ability tagged and filmed in a single session. For activities such as Association Football, this method allows for the simultaneous filming of several candidates at similar performance levels, facilitating the moderation process and reducing the time required by centres for filming each activity.

All participants in an activity must be listed in the Order of Merit form, with only the five candidates selected for the moderation sample indicated in the 'candidate identification' column. Centres should submit typed copies where possible, ensuring that all pages have been included.

Order of Merit forms should be saved in the appropriate section of the Submit for Assessment platform. Before uploading videos and documentation, centres should use clear, descriptive file names that reflect the activity and include suitable identifiers for moderation. Centres should download the latest version of these forms from the Samples Database website at the start of each examination series and use the updated forms for Track and Field and Competitive Swimming.

Order of Merit forms and logs for all candidates submitting evidence for Weight Training for Fitness and Hill Walking should be uploaded to the Submit for Assessment platform.

## **General comments**

The filmed evidence submitted was generally clear, with activities such as Tennis showing both the performers' action and the outcome of the skill effectively. Some centres spent time adding unnecessary elements, such as additional music, presentations, or warm-up activities resulting in elaborate films. These additions do not aid the moderation process. However, identifying candidates in the filmed evidence does assist in moderation.

Errors were noted in some centres when converting times and distances into marks. It is crucial to refer to the tables in the Coursework Guidelines Booklet to ensure that minimum requirements for marks are met.

Centres should avoid speeding up filmed evidence, as this can prevent Moderators from accurately assessing the true performance. The evidence should only be sped up or condensed where specifically allowed in the Coursework Guidelines Booklet.

When awarding marks at Level 6, candidates must demonstrate exceptional skill and technique in their chosen physical activities. This should be supported by high-quality filmed evidence. Compared to Level 5, where candidates show strong but good performance, Level 6 requires exceptional performance that significantly exceeds Level 5 standards.

## **Comments on specific activities**

### **Track and Field Athletics**

In Track and Field Athletics, candidates must strictly follow the official rules of each event. For example, the shot must be held correctly throughout the throw, and foul throws must be avoided. The times achieved in the 100 and 200 metres should be filmed in a single continuous shot from one angle. Some centres used multiple angles or combined clips, making it more challenging to accurately verify times and distances.

### **Cross-country running**

For cross-country running, maps with a scale indicating distance and height climbed must be used as evidence. It must be possible to verify the height climbed and distance covered. Hand-drawn maps and minimal annotations were insufficient. The course should be predominantly a grass course in open terrain, avoiding artificial surfaces, roads, or footpaths (except when crossing). Centres providing strong evidence typically included 15 minutes of footage, showing the stopwatch at the start and end to confirm times.

### **Games**

The level of challenge presented must align with the candidates' abilities and reflect the marks awarded. In some cases, candidates were filmed in very small-sided games or against opposition and with teammates that did not provide a sufficient challenge to demonstrate skills at the required level. Centres are reminded to review the assessment conditions for each activity as outlined in the Coursework Guidelines Booklet.

For stronger candidates aiming for higher levels, participation in a school or club-level game, or a match of similar standard, is required in certain activities. The majority of the filmed evidence for stronger candidates should focus on full competitive games to allow candidates to demonstrate their abilities under more demanding conditions. Only brief attention should be given to isolated or basic skills for stronger candidates.

### **Rounders**

The filmed evidence submitted for Rounders generally highlighted candidates' abilities in striking and fielding. However, in some cases the pitches used were inadequate to demonstrate the full distance candidates could achieve when hitting the ball before its first bounce. For stronger candidates, the most effective evidence included not only technical skills but also tactical play and advanced field placements, as recommended by the Coursework Guidelines Booklet. This provides a comprehensive assessment of their abilities.

### **Personal Survival**

Several candidates wore long-sleeved shirts in place of sweatshirts and neoprene shoes instead of standard trainers. Candidates must wear appropriate clothing corresponding to the level at which they are being assessed. The activity should be carried out as a continuous sequence of tasks, without any rest breaks between the various elements of the set tasks.

### **Life Saving**

When submitting evidence for life saving, centres should ensure that the assessment conditions and performance indicators are carefully followed when planning the recorded evidence. Candidates placed at Level 4 or higher should demonstrate integrated skills that collectively contribute to a comprehensive rescue.

### **Skiing**

Many candidates successfully demonstrated their technique on a red run, but they were often filmed on slower, less challenging sections of the course. As detailed in the Coursework Guidelines Booklet, it is beneficial to film candidates performing their skills at pace and on more demanding terrain, as this better reflects their ability to cope with the challenges of the course while maintaining proper technique. This approach provides a clearer assessment of candidates' proficiency and adaptability in skiing.

### **Orienteering**

For orienteering, candidates should be taught on courses different from the final assessment to ensure the course is unfamiliar. Some candidates had previously used the course, resulting in ineffective map and compass work. The Coursework Guidelines Booklet specifies the required course standards for different

levels. Centres must provide a scaled map to justify course difficulty. Generally, the standard of evidence was good, with useful information and suitable terrain for assessment.

### **Hill Walking**

Evidence for Hill Walking must include a detailed route card and logbook that thoroughly covers the planned walk. Route cards often span several pages, clearly demonstrating candidates' ability to apply Naismith's Rule multiple times throughout the journey. Centres placing candidates in higher levels should ensure that candidates are filmed discussing their application of Naismith's Rule in an interview, as well as handling one of the unforeseen situations specified in the guidelines. Candidates should ideally walk in groups of four, consistently referring to both the route cards and the map during the walk. Stronger candidates are generally expected to navigate using the map, without relying solely on a pre-drawn route.

### **Weight Training for Fitness**

In the Weight Training for Fitness activity, marks were often awarded too generously. Some candidates focused on creating elaborate, pre-prepared presentations, which led to more time spent on presenting rather than performing the exercises. Following the Coursework Guidelines Booklet, candidates should provide brief, live, unscripted verbal explanations of each exercise on camera, demonstrating their understanding of the underlying principles. Filmed evidence should demonstrate proper technique and optimal performance rather than polished presentations. Footage of warm-ups or body preparation is not required, and running commentaries should be avoided. A comprehensive programme requires that all sections of the log are thoroughly completed.