

PHYSICAL EDUCATION

Paper 0413/11
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.

General comments

The majority of 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

Many candidates were able to identify two muscle fibre types.

Question 2

- (a) Most candidates were able to identify a global sporting event. The most common response was the Olympic Games.
- (b) This was answered well by many candidates. Strong candidates gave a wide variety of responses linked to sporting achievement, financial factors and social improvements. There were examples of repetition of factors from some weaker candidates.

Question 3

- (a) This was generally a well-answered question with many candidates using a variety of well-described examples. There was some confusion in weaker responses and some incorrect use of terminology.
- (b) (i) Most candidates were able to identify at least one of these stages of learning.
- (ii) Many candidates demonstrated some understanding of the features of feedback used in each stage of learning. Weaker candidates typically found it difficult to suggest differences between the two.
- (iii) Many candidates showed a good understanding of the benefit of intrinsic feedback.

Question 4

- (a) (i) Most candidates were able to identify the movement at the elbow. Stronger candidates could identify both types of movement.
- (ii) Most candidates answered well with many achieving full credit. Stronger candidates used precise and clear language in responses.

- (b) (i) Most candidates were able to name both types of synovial joint.
- (ii) This was answered very well by most candidates. Some weaker candidates did not note the need to describe different functions.

Question 5

- (a) Most candidates were able to correctly identify the missing substances within the equation.
- (b) Many candidates answered this well. However, some weaker answers tried to simply repeat anaerobic respiration and aerobic respiration as justifications.

Question 6

- (a) (i) Weaker candidates found it difficult to demonstrate a clear understanding of the terms. Generally, they did not apply their understanding well to the table tennis player and some gave generic descriptions of the stages of the information processing model only.
- (ii) Only stronger candidates were able to give a clear explanation of this concept. The strongest could go further and include how it could affect the table tennis player.
- (b) The majority of candidates gained credit by making suitable statements about storage. Some candidates gave information related only to one aspect of memory rather than describing differences.

Question 7

This was well answered and many candidates gave a variety of responses. There was some repetition by very weak candidates, whereas stronger candidates tended to describe three different ways successfully and generally showed a good application of their understanding.

Question 8

- (a) Many candidates identified the method successfully. Weaker candidates tended to identify it as continuous training.
- (b) Most candidates gained credit with a range of well applied responses seen.
- (c) Most candidates were able to name some principles of overload. Fewer candidates were able to successfully apply their understanding to the training programme.
- (d) Most candidates were able to give good responses to the question.

Question 9

- (a) Weaker candidates generally needed to be more specific in their answers to this question. Some very weak candidates did not seem to have knowledge of these structures.
- (b) Most candidates gained credit. Stronger candidates tended to include hypertrophy and bradycardia in responses.

Question 10

- (a) (i) Most candidates were able to locate a gastrocnemius muscle on the diagram.
- (ii) Most candidates were able to identify forces acting on the sprinter. However, some found the application of the forces more difficult.
- (b) Most candidates gained credit for this question. When being described some factors needed to indicate an increase in these factors as a result of the warm up rather than just identifying the factor. Some weaker responses were overstatements.

Question 11

- (a) Most candidates gave a precise answer.
- (b) Most candidates applied their knowledge well to describe the causes successfully.
- (c) Many candidates were able to gain credit for this question. Stronger candidates tended to include descriptions of how rest prevented worsening of the injury.

Question 12

Most candidates gained credit with a number answering fully correctly. Most candidates were able to name three different types of PED. There were some examples of a type of PED being repeated. Most stronger candidates could give appropriate benefits for the physical activity.

Question 13

- (a) Most candidates were able to gain at least partial credit. The most common issue related to oxygen being breathed in rather than consumed or used.
- (b) (i) The majority of candidates read this table correctly.
(ii) Stronger candidates tended to demonstrate that neither the shot putters nor the inactive individuals trained aerobically.
- (c) The majority of candidates were able to identify factors that can affect VO_2 max with many achieving full credit.

Question 14

- (a) Candidates who gained credit were those who applied the characteristic to the named physical activity. There were examples of candidates giving a generic description of the characteristic instead and not attempting to apply it to their named activity.
- (b) This question was usually well answered. However, there was sometimes confusion with open and closed examples being given the wrong way around by very weak candidates.

Question 15

- (a) The majority of candidates showed a knowledge of the goal-setting principles.
- (b) Many candidates were able to apply their knowledge of a measurable goal to an appropriate named physical activity.

PHYSICAL EDUCATION

<p>Paper 0413/12 Theory</p>

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.

General comments

The majority of candidates answered all questions and there was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was usually good with key terms used well within answers from stronger candidates.

Comments on specific questions

Question 1

Most candidates correctly identified the two components of blood.

Question 2

The majority of candidates were able to identify both personality types and suggest an appropriate activity for each with an appropriate justification. Some weaker candidates chose inappropriate physical activities or justifications.

Question 3

- (a) Most candidates were successful in giving a description within tennis, usually to provide more accurate decisions using Hawkeye. The use of technology in cycling and javelin were less generally well described by weaker candidates.
- (b) The majority of candidates demonstrated a good understanding of the topic. Many fully described their points and showed their ability to apply knowledge well within this topic.
- (c) Candidates who answered this question well maintained the focus on the viewer rather than the performer or the sport. The disadvantages were generally less well described.

Question 4

- (a) Most candidates were able to identify the three joints types shown on the diagram of the skeleton.
- (b) The majority of candidates gained at least partial credit. The femur was generally identified but a number of candidates gave an incorrect answer for a second bone.
- (c) Most candidates were able to identify three components of the joint. Descriptions were typically good with some weaker candidates only being able to name components successfully.

- (d) A number of weaker candidates did not develop their answers to draw a comparison however many candidates answered well.

Question 5

Most candidates demonstrated at least some understanding of the topic. However, a small number of candidates did not describe or use examples.

Question 6

- (a) Some candidates did not link their answers to swimming. A number of candidates limited their response to a generalised definition. Stronger candidates gave precise and well-explained answers that related to the swimmer.
- (b) A number of very weak candidates used the open/closed continuum. Those candidates who used the fine/gross and basic/complex continua usually answered the question well.

Question 7

- (a) Most candidates showed a good understanding of the topic and gained at least partial credit.
- (b) The majority of candidates were able to correctly identify two characteristics of a skilled performance. Those who could then often correctly linked the characteristics to examples in the named activity to gain additional credit. A small number of candidates did not attempt to link their response to the named activity.
- (c) Candidates needed to link the types of guidance to the named physical activity. Some weaker candidates identified two types of guidance but then then gave responses not linked to their activity.

Question 8

- (a) The majority of candidates were able to correctly describe the three phases of a warm up.
- (b) The descriptions given varied considerably. Stronger answers were precise, specific and well applied. Weaker responses did not seem to link the activities of the warm up to their named activity.
- (c) Most candidates identified two relevant benefits. Some candidates confused psychological and physiological benefits.

Question 9

- (a) (i) This was answered well and most candidates gained full credit.
- (ii) Most candidates gained at least partial credit. Answers needed to demonstrate the benefit to a performer in the named physical activity. Stronger candidates described three clear examples.
- (b) The majority of candidates gained credit by indicating a weight gain.

Question 10

- (a) (i) Candidates who gave an answer with units were generally successful.
- (ii) Many candidates could apply their skills to the graph to give the correct numerical and included a unit.
- (b) Most candidates showed some understanding of this topic. Stronger responses included good explanation.
- (c) Candidates generally demonstrated a detailed understanding of this topic.

Question 11

- (a) Candidates who gained credit were those able to describe the differences between the feedback used at the differed stages of learning. A number of candidates applied their understanding to only one stage of learning.
- (b) Most candidates showed a good understanding of the causes of anxiety. Weaker candidates confused the causes with the effect of anxiety on a performer.

Question 12

- (a) Most candidates were able to give a correct description but some weaker candidates confused residual volume with other breathing volumes.
- (b) Most candidates identified the diaphragm and intercostal muscles. Fewer candidates were able to provide an accurate explanation of the function. Some candidates limited their answers to description.
- (c) Most candidates were able to give three characteristics and many also gave appropriate explanations.

Question 13

- (a) Almost all candidates were able to define a real risk. Weaker candidates seemed unfamiliar with the term perceived risk.
- (b) There were some strong and well applied answers to this question and many candidates achieved full credit.

Question 14

- (a) Most candidates used the 12-minute Cooper Run as their example and provided a good description of how the test was completed.
- (b) Generally candidates seemed to find it easier to describe the disadvantages than to describe the advantages but this was generally well answered by most candidates.
- (c) Most candidates gave a good example of an applied benefit of speed for a performer.

PHYSICAL EDUCATION

<p>Paper 0413/13 Theory</p>

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.

General comments

The majority of candidates responded to all questions. There was no evidence to suggest that there was insufficient time to complete the paper. The standard of responses was generally good.

Comments on specific questions

Question 1

The majority of candidates were able to name two bones.

Question 2

- (a) Most candidates were able to suggest suitable short-term effects of exercise on the performer. The common issue for weaker candidates was to confuse short-term effects with long-term effects.
- (b) Most candidates were able to identify a fitness test that could be used to measure stamina. The descriptions of how the test was carried out were generally well written and sufficiently clear.
- (c) The majority of candidates suggested continuous training as an appropriate method of training and many were able to give appropriate justifications for their choice.
- (d) Most candidates were able to identify the principles of training. However, some descriptions from weaker candidates were lacking in detail and were not applied.

Question 3

- (a) Most candidates named anabolic steroids as a type of PED a shot putter might use. The type of PED identified for the taekwondo performer was generally less well answered with some weaker candidates repeating their first answer. Stronger candidates who answered this part of the question well typically suggested stimulants and improving reactions to block.
- (b) Most candidates gained full credit.

Question 4

- (a) (i) Some candidates did not include a unit with their answer. Many candidates achieved credit.
- (ii) Most candidates were able to describe the differences in the graph well, showing a good application of their knowledge.

- (b) Most candidates demonstrated a basic understanding of the principle of EPOC. Some weak responses were too vague.
- (c) Most candidates were able to attempt the question. Weaker candidates tended to give overstatements or vague responses.

Question 5

- (a) Each description needed to be linked to the named physical activity to gain credit. Weaker candidates did not apply their understanding and gave a generic description instead.
- (b) Most candidates were able to give a good response to at least the disadvantage of using knowledge of results. Weaker candidates often included some contradictions in their answers.
- (c) Most candidates were able to name a type of guidance and many gave an appropriate benefit. Some weaker responses described the guidance rather than a benefit.

Question 6

- (a) (i) Most candidates were able to identify the type of joint.
 - (ii) Stronger candidates were able to apply their knowledge and state the type of movement.
- (b) (i) Only some candidates were able to identify the movement as plantar flexion, some confused this with other movements.
 - (ii) Many candidates were able to correctly name the muscle.
- (c) (i) The majority of candidates correctly identified the type of movement.
 - (ii) Most candidates gained credit, with many achieving full credit. However, for some weaker candidates their response often contained inaccuracies or confusion.

Question 7

- (a) Candidates who achieved credit did so by including in their description differences between sport and physical recreation. Weaker answers often described either sport or physical recreation in isolation.
- (b) To gain credit candidates needed to provide explanation in their responses. Those candidates who recognised this, gave responses that explained how each factor identified could have an influence and were successful.
- (c) Stronger candidates showed a good understanding of the topic with some excellent answers seen. Weaker candidates often could not develop their answers beyond a list.

Question 8

Those candidates who developed their answers beyond just identifying the factors usually met the demand of the question and performed well.

Question 9

- (a) Most candidates were able to identify three forces. The explanation of the effect on the cyclist was less well answered, particularly by weaker candidates.
- (b) The majority of candidates applied their knowledge well to this question and gave succinct answers.
- (c) (i) Most candidates were able to draw a correct lever.
 - (ii) Stronger candidates gained credit for this question by providing an accurate description of a relevant example.

Question 10

Most candidates described well the benefits for the professional performer showing a depth of understanding of the factors involved.

Question 11

- (a) Most candidates demonstrated a good understanding of the long-term effects of exercise on the heart. Some weaker candidates did not limit their answers to the effects of exercise on the heart as was required by the question.
- (b) Most candidates showed a good understanding of this topic. An error by some weaker candidates was to reverse the structures of arteries and veins.

Question 12

- (a) Many candidates gained credit as most identified A and C. Stronger candidates also named the B.
- (b) Most candidates were able to identify D. Fewer were able explain its function accurately.

Question 13

- (a) Many candidates were able to suggest a reason for various chosen activities being appropriate for the percentage of fast and slow-twitch muscle fibres provided in each case.
- (b) Many candidates were able to describe characteristics of fast-twitch muscle fibres.

Question 14

- (a) Most strong candidates gained credit for this definition. Weaker candidates confused this with other syllabus terms.
- (b) For this question a small number of candidates gave a relevant activity but contradicted themselves in their responses. Stronger candidates provided well-structured and clear answers.
- (c) Most candidates were able to give two examples relevant to a games player.

Question 15

- (a) Candidates generally demonstrated a basic understanding of the effects of high-altitude training. Some candidates needed to develop their answer by providing more detail, such as linking to the benefit to performance of a return to a lower altitude.
- (b) There were some good and varied responses to this question showing candidates were able to apply their knowledge and make reasonable suggestions.

PHYSICAL EDUCATION

Paper 0413/02
Coursework

Key messages

- Some centres are advised to read the Coursework Guidelines Booklet more carefully prior to filming.
- Games activities require appropriate match play to support awarded marks, particularly for stronger candidates.
- Filmed evidence must be reviewed by the centre prior to despatch.
- Assessment information, when relevant or appropriate, should be written onto the Order of Merit sheets. For example, course difficulty in Orienteering.
- Filmed evidence for each activity is best as a continuous video and not a series of very short short clips.

General comments

Administration

Some centres applied to make use of a component adjustment this series. This required an application to be made and this required those candidates using the adjustment to have all their work evidenced.

The overall standard of coursework paperwork and filmed evidence was good and there was some excellent footage. There were few arithmetical mistakes by centres.

Most centres submitted coursework with the required forms and DVD evidence completed satisfactorily. Often the filmed DVD evidence of candidates' performances in a range of physical activities was of a high quality. However, a few centres did not submit coursework according to the guidelines as described in the Coursework Guidelines Booklet. Most centres used the forms from the samples database effectively.

Comments of specific activities

Comments on filming

- Candidate identification was a problem in some centres. Certain colour combinations are difficult to see, e.g. yellow on white or white on light blue. Filming some games caused problems due to distance, especially if numbers are only placed on the back of shirts. Identifiers should be on the front and back of shirts. Giving each candidate a different colour bib is acceptable and it can make it easy to identify them.
- For some centres filmed evidence had a narrow format, reducing the screen size and resulting in restricted evidence. Settings should be adjusted and evidence reviewed by the centre before submission.
- Where candidates are given high marks the filmed evidence should show complex drills and may have minimal coverage of basic skills. Appropriate game footage should be used to support any high marks awarded.
- At some centres the level of demand and the situations created did not allow for sufficient challenge for the candidate to be the awarded high marks.

- Filming should always show the skill and outcome. In Badminton for example, the camera angle should allow both the shot and the flight of the shuttlecock to be seen.
- Good filmed evidence was in a continuous format and avoided very short clips. These are best presented on as few DVDs or USB flash sticks as possible. Separate DVDs should not be used for individual candidates and evidence is often better ordered by activity.
- Where activities require certain assessment conditions supporting evidence must be provided, usually on the filmed evidence. Notes can be made on the Order of Merit forms. Piste markers in skiing, referenced rock climbing difficulty and orienteering course difficulty are all examples of such evidence.

Games

The level of demand must be appropriate for the ability of the candidate and must match the mark awarded. In some cases candidates were filmed in games where the opposition (and team mates) did not provide sufficient level of demand to enable skills to be performed at a level that supported the awarded marks. For higher-marked candidates a school/club-level game or game of a similar standard is required. Evidence for a games activity should include isolated skills, small group drills and either a small-sided or full-game situation. For higher-marked candidates, the filmed evidence should show more of the applied situations, with isolated/basic skills allocated only a short time.

Rounders

The filmed evidence sent by centres generally focused on the ability of candidates to strike and field the ball. The best evidence of higher ability candidates included tactical play within the recordings.

Weight Training

Many centres submitted logs and filmed evidence. Good evidence clearly showed the technique and included a summary of the exercise where the candidate applied theoretical knowledge. Weaker candidates needed a greater understanding of the principles that underpin this activity. All sections of the log should be completed and generally more than one sheet is required to provide an effective programme. Filmed evidence must support the logs and demonstrate candidates' understanding of the effectiveness of each activity. Good filmed evidence included the optimum performances and the candidate being able to demonstrate the effect the exercise would have on their performance in their chosen activity. The assessed skills section of the Coursework Guidelines Booklet was used well in some fitness programmes.

Life saving

In some centres this activity was too generously assessed. Weaker candidates tended to give insufficient care to the casualty when landing them from the water. Others needed to keep the casualty tighter to their body. Some executed the tows from poor positions or did not use their body to support the casualty. A poor arm position and hand/fingers on the throat was sometimes observed.

Personal Survival

This activity should be completed and assessed as a continuous sequence of tasks without breaks/rest between tasks and with the tasks completed in the order stated. Evidence must include the filming of a stop-watch to confirm times. The surface dives must be completed during the distance swim and included in the evidence. Please note the clothing required by the different levels in the initial timed swim.

Cross-country running

Most courses were suitable although a number of the maps presented did not have an accurate scale or indicate the height climbed. Some good practice showed the times on a stop-watch to support awarded marks. A few centres tried to assess candidates on flat playing fields or on tarmac paths. This did not meet the assessment conditions. Centres are reminded that roads, surfaced paths etc. cannot be used for running and should only be crossed as needed.

Track and Field Athletics

Track and Field Athletics evidence should include a close-up of the measuring tape and stop-watch. Careful measurements are required. Running event times, once totalled for sprints, must use the mark below (e.g. 55.2 in girl's 200 m should have a mark of 21). Roughly approximating a distance using a tape lying alongside the event area is not appropriate. Good filmed evidence showed the tape measure being correctly placed before it was zoomed in on to show the measurement of the distance achieved. The filming of the field events should enable the action of the throw or jump to be seen along with the relevant landing points, as well as the correct application of the rules. Foul throws/jumps should not be awarded. The 100 m, 200 m and hurdles should be assessed and filmed twice.

Hill Walking

Hill Walking evidence must support navigational skills. Candidates must be assessed as individuals even though they participate in groups. This should be evident from the filmed evidence, candidate interviews during the expedition and the individual logs. A leader role is needed for some levels. Candidate evidence must include an interview with the candidate showing skills in an unforeseen situation where appropriate to the awarded mark. It should be noted in some centres that evidence needs to support detailed navigational skills rather than being just a view of candidates walking. The best evidence of higher ability candidates was seen when they wrote their own route cards and led the leg that they had written. They were also able to complete the unforeseen situation when intercepted in the middle of their walk rather than at an agreed check point.